

PORT OF LIVERPOOL.



ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH
TO THE
PORT SANITARY AUTHORITY,
FOR THE YEAR
1909.

[ORDERED BY THE PORT SANITARY AND HOSPITALS COMMITTEE TO BE
PRINTED, 13TH APRIL, 1910.]

LIVERPOOL :
C. TINLING AND CO., LTD., PRINTING CONTRACTORS, 53, VICTORIA STREET.

—
1910.

INDEX.

	PAGE
Aliens Act, 1905	46
Anthrax	17
Canal Boats	45
Cholera	6, 14, 15
Comparative Values of Imports of Foods	62
Disinfection	16
Docks and Basins, Area of	4
Emigration	63
Emigrant Inspections	66
Enteric Fever	12, 13
Food Act, 1907, Regulations as to	47
Food Inspection	47-62
Health Certificates (Consular)	13
Infectious Disease, Powers with regard to	5
Liverpool Port Sanitary Authority Established	4
Local Government Board Orders	Appendix
Medical Inspection, 1909	11
Phthisis	11
Plague	9, 14, 15
Quarantine Station	5
Rats	10
Regulations as to Cholera, Yellow Fever, and Plague	5 and Appendix
Rejections of Emigrants	66
Sanitation of Vessels	42
Smallpox	11
Special Visits and Enquiries	45
Table 1—Enteric Fever	12
,, 2—Infectious Disease Landed	14
,, 3—Infectious Disease Landed Abroad	15
,, 4—Vessels Disinfected	16
,, 5—Anthrax cases reported	17
,, 6—Vessels Reported	18-41
,, 7—Inspection of Shipping	43
,, 8 and 9—Insanitary Conditions	44, 44A
,, 10—Continental Meat	53
,, 11, 12 and 13—Food Stuffs Condemned	59-61
,, 14—Imported Food Stuffs	62
,, 15, 16 and 17—Emigration	63-65
,, 18—Rejections of Emigrants	66-68
Yellow Fever	10, 14, 15



Digitized by the Internet Archive
in 2017 with funding from
Wellcome Library

<https://archive.org/details/b29993490>

Route of the Sixth Cholera Pandemic 1902 to present time.

Explanation.

1902-3	Violet.
1904-6	Black.
1907-8	Green.
1909	Red.

Towns affected. •

Provinces affected, e.g. KORASSAN.

Imported or single cases only +

Key locations and events marked on the map include:

- Mecca (Feb. '02):** 33,000 deaths in Egypt (1902).
- Bombay:** 32,000 deaths.
- Calcutta:** 10,000 deaths.
- Persia:** Korassan, Meshed, Teheran, Shiraz, Kerman, Bassorah, Isfahan, Bagdad, Hamadan, Resht, Vando, Diarbekir, Van, Tiflis, Baku, Astrabad, Herat, Meshed, Teheran, Isfahan, Bagdad, Hamadan, Resht, Vando, Diarbekir, Van, Tiflis, Baku, Astrabad, Herat.
- Russia:** Archangel, Olenets, Volodga, Viatka, Perm, Ufa, Orenburg, Simbirsk, Saratov, Astrakhan, Rostov, Mariupol, Slavropol, Yekaterinburg, Tula, Riazan, Smolensk, Vitebsk, Polotsk, Minsk, Grodno, Lodz, Siedlec, Warsaw, Poznan, Gdansk, Danzig, Stettin, Berlin, Hamburg, Frankfurt, Cologne, Amsterdam, London, Paris, Lyons, Marseilles, Algiers, Tunis, Cairo, Suez, Alexandria, Jeddah, Medina, Mecca, Jeddah, Medina, Mecca.
- Europe:** Stockholm, Copenhagen, Helsinki, Stockholm, Copenhagen, Helsinki, Stockholm, Copenhagen, Helsinki.
- Asia:** Bombay, Calcutta, Madras, Singapore, Hong Kong, Shanghai, Peking, Tientsin, Hankow, Canton, Amoy, Swatow, Ningbo, Hangzhou, Suzhou, Yangzhou, Nanjing, Beijing, Tianjin, Shijiazhuang, Zhengzhou, Xuzhou, Hefei, Wuxi, Nanjing, Beijing, Tianjin, Shijiazhuang, Zhengzhou, Xuzhou, Hefei, Wuxi, Nanjing.

Explanation.

1902-3	Violet.
1904-6	Black.
1907-8	Green
1909	Red

Towns affected. ●

Provinces affected, e.g. KORASSAN.

Imported or single }
cases only +

Explanation.

1902-3	Violet.
1904-6	Black.
1907-8	Green
1909	Red

Towns affected. ●

Provinces affected, e.g. KORASSAN.

Imported or single }
cases only +

PORT SANITARY AUTHORITY

OF

LIVERPOOL.

REPORT FOR THE YEAR 1909,

BY THE
MEDICAL OFFICER OF HEALTH.

In accordance with the duty imposed by the Local Government Board in their General Order, dated March 23rd, 1891, the following Report for the year ending December 31st, 1909, is made to the Liverpool Port Sanitary Authority.

The Report covers the work of the Authority during the year, and includes a summary of the measures adopted to discover Epidemic or Infectious Disease on shipboard, and to prevent their introduction into the Port or further spread on shipboard, as well as the steps taken to discover and abate any conditions inimical to health existing on any ships, vessels or canal-boats lying within the area of the Port. Moreover, there is given an account of the action taken under the Regulations of the Local Government Board issued under the Public Health (Regulations as to Food) Act, dealing with Foreign Meat and Unsound Food. The Report further includes an account of action taken under the Aliens Act, together with certain statistical information kindly supplied by the Board of Trade regarding Emigration from Liverpool during the course of the year.

The jurisdiction of the Authority is co-extensive with the limits of the Port, and includes within its area, not only the Docks, Quays, Wharves, &c., belonging to the Mersey Docks and Harbour Board, the extent of which is set out below in tabular form, but also the Docks of the London & North Western Railway at Garston, as well as the lower

portion of the Estuary of the Mersey and the sea within three miles of the coast line extending from Hoylake to Formby Point. And its powers are exercisable over any vessels lying within this area.

By the opening of the Vittoria Dock in Birkenhead, during the course of the year, the estate of the Dock Board was further increased, and its dimensions are now as follows:—

TOTAL WATER AREA AND LINEAL QUAYAGE OF THE LIVERPOOL
AND BIRKENHEAD DOCKS AND BASINS.

	Water Area.		Lineal Quayage.	
	Acres.	Yards.	Miles.	Yards.
Liverpool Docks and Basins	427	2,967	26	1,466
Birkenhead Docks and Basins	171	3,259	9	1,422
Total	599	1,386	36	1,128

AREA OF THE DOCK ESTATE.

Liverpool	1,171 $\frac{1}{4}$ acres.
Birkenhead	506 „
Total	<u>1,677$\frac{1}{4}$ „</u>

This area is exclusive of certain lands at Dingle, Tranmere and Seaforth.

It is not without interest to note that the Authority now enters upon its thirty-seventh year, having been constituted by an Order of the Local Government Board dated June 11th, 1874.

The most noteworthy features of the year 1909 are the commencement of the operation of the Foreign Meat Regulations of the Local Government Board, and the issuing of revised Regulations for Liverpool and Manchester, dealing with Cholera, Plague and Yellow Fever; and the spread of Cholera to points so near to England as Holland and Belgium.

The revised Regulations as to Cholera, Plague and Yellow Fever, which are included in an Appendix to this Report, bring Liverpool and Manchester into line with the International Sanitary Congress of 1903, held at Paris, and supersede the Regulations of August, 1897; these Regulations superseded the old practice of Quarantine detention by the method of Medical Inspection of vessels from infected ports, removal of all cases or suspected cases of these diseases to the Port Sanitary Hospital, disinfection of vessel, and notification to the respective Authorities of the addresses of all persons who are proceeding from the vessel to other districts, in order that such persons may be kept under observation for a period of five days.

The revised Regulations give increased powers to the Authority as regards vessels on which Plague has occurred amongst rats—or even only an exceptional mortality amongst rats—to cause measures to be taken to kill rats on such vessels and prevent their egress from the vessels ashore; also for the extermination of mosquitoes and their larvae in vessels infected with Yellow Fever; this brings the powers of the Authority in line with the findings of recent investigators of the causation of Plague and Yellow Fever respectively.

Previously under the Quarantine Acts vessels were detained off Hoylake. But in 1809 the Quarantine station was removed from Hoylake to the Sloyne, as is shown by the following extract from the “London Gazette” of November of that year.

“At the Court at the Queen’s Palace, the 18th of October, 1809, present the King’s most Excellent Majesty in Council. Whereas it has been represented to his Majesty in Council, that in his Majesty’s Order in Council of the 5th April, 1805, appointing the places for the performance of Quarantine by ships and vessels bound to the several ports of this Kingdom, Hoylake, near Liverpool, is prescribed as the place for the performance of quarantine by vessels arriving at the Port of Liverpool, liable thereto; but that Bromborough Pool has been found, on a careful inquiry recently made, to be a safer and more convenient place for the performance thereof; his Majesty is therefore pleased, with the advice of his Privy Council, to order, and it is hereby ordered, that all such ships or vessels as are or shall be bound to the Port of Liverpool, or any creek or place belonging to or within the said port, from any place or places from whence quarantine is required to be performed, shall in future perform their quarantine in Bromborough Pool, instead of Hoylake.”

CHOLERA, PLAGUE AND YELLOW FEVER.

Cholera.

Before proceeding to discuss the distribution and extent of the present Pandemic of Cholera it will be of interest to note the course which has been followed by the disease in its spread from the endemic centres of the Middle East, and to mention previous pandemics by which it has been preceded and the routes which they followed.

The present is the sixth pandemic which has been recorded. The first one did not extend to this country. The second (1826-37) spread from Bengal through Afghanistan to Russia, and in 1830 spread up the Volga Basin to Central Russia. The following year it passed through Poland into Austria and Germany, and England was invaded by a vessel from Hamburg to Sunderland, the first place on our coasts to be attacked. During 1831 and 1832 England suffered severely, and vessels from this country carried the disease to both North and South America.

The third pandemic again commenced in the Endemic Centres of the Lower Ganges and followed the same route as the Second through Persia and the Ural Valley, reaching Moscow in June, 1847, where it again paused. Berlin was reached in June of the following year, the infection being conveyed by way of Riga and Dantzic, and Hamburg was reached in August. By September it had invaded England, appearing almost simultaneously at Sunderland, Hull and London, the avenues of importation being somewhat uncertain. Leith was independently infected at a slightly later date by a vessel from Cronstadt. This Pandemic lasted 15 years, and like the previous one was practically world-wide in extent.

The fourth pandemic followed a somewhat different route. Pilgrims carried it to Mecca, from which centre it was disseminated over the Mediterranean Basin. A vessel arriving at Southampton transported it into this country in 1865, but it obtained no foothold. Belgium was likewise attacked. In 1866 it was prevalent in the Netherlands, and it is interesting to note that Rotterdam acted as a distributing centre, a vessel from that port carrying the disease into Liverpool. In England no fewer than 14,378 persons died of Cholera in that year, of which number 1,782 died in this city, but the disease was not so extensively

spread abroad as in previous epidemics, principally affecting seaports. This was the last occasion on which Cholera was present to any formidable extent in England. The numbers who perished throughout the world are to be estimated in hundreds of thousands.

The fifth pandemic spread from Egypt where the disease first made its appearance, but whether re-imported from India or merely an extension of a long smouldering fire, is uncertain. In 1883 Koch discovered the *Comma bacillus*, the casual organism of the disease. This Pandemic affected Toulon and other centres in Southern Europe, and was carried to South Africa, and South America. An extremely sudden and fatal outburst occurred in Hamburg in 1892, due to polluted river water being drunk.

The present or sixth pandemic well illustrates the slow march of this insidious disease, which may follow the most devious routes, being often turned back in its course by Seas, Deserts and Mountain Chains. But the route followed is always along some avenue of commerce such as a navigable river.

Arising presumably in the Delta of the Ganges it was carried by pilgrims to Mecca in February, 1902. Hence it was carried by the pilgrims returning to Egypt, the story being that one of them conveyed a bottle of water from the Holy Well at Mecca to his own district, and then proceeded to distribute the contents amongst the neighbouring wells. At all events Cholera appeared in a village near Assiout in July and caused no fewer than 33,000 deaths in Egypt. Hence it passed along the Syrian coast.

In 1903, the disease, being apparently turned back by the Taurus Mountains, spread down the Euphrates and Tigris to appear in Bagdad in January, 1904. By various routes it dispersed itself through Persia and the Transcaspian region, and by July it was at Baku, where it continues at the moment of writing. It reached its old focus at Astrakhan whence, as in previous pandemics, it was rapidly conveyed by boatmen up the Volga. Its further progress through Russia in the following two years is difficult to follow, owing to the disturbed condition of the country, but in 1905 it spread through Poland, and was carried by raftsmen down the Vistula into East Prussia, and cases were disseminated as far as Dantzic, Bremen and Frankfort. Happily owing to the

efficient sanitary precautions taken in Germany that country no longer acted as a favourable centre for its further progress westward, as had happened in previous pandemics. In 1907 the Southern portions of Russia were largely affected. In 1908 Cholera was epidemic throughout the larger part of Russia, and in September it was signalled at St. Petersburg, in which city it rapidly reached alarming proportions, and whence it was conveyed along the Baltic littoral to Finland. Many ports in the Black Sea were also affected late on in the year. It continued at St. Petersburg through the winter of 1908-9, and with the approach of summer again spread through the country. Archangel and Riga were infected. There were 5,238 cases in St. Petersburg during 1909. A somewhat smaller number than during 1908.

The ports on the Black Sea were only very slightly affected. A number of cases appeared in the easternmost portions of Prussia, but the disease was kept well in check.

Vessels from Russia conveyed Cholera into Holland where it appeared at Rotterdam on August 20th, the water from the River Meuse apparently being infected. In the following month or six weeks some thirty or forty cases occurred, the disease being almost entirely confined to those who had drunk unfiltered river water. Although the number of cases was small, considerable apprehension was aroused by the proximity of the Netherlands to this country, and the large number of persons passing through Rotterdam for England and America. Apprehension was further increased by the manner in which boatmen and others carried the disease to some fifteen points along the waterways of the country. It appeared in the vicinity of Antwerp on October 26th; but at none of these points did it obtain any foothold.

All vessels from Rotterdam were medically visited, and special attention was paid to the water tanks and bilges. Fortunately the precedent of 1865 was not followed and no case of Cholera was brought to this port.

A seaman from a vessel from the Bay of Luga in the Government of St. Petersburg died in hospital at West Hartlepool during September, death being due to Cholera. This was the only case occurring in Great Britain.

The Ports of St. Petersburg, Cronstadt, Viborg, Riga, and Rotterdam were regarded as infected with Cholera during 1909, and all vessels

arriving from these ports were subjected to medical examination before entering dock. Close enquiry was made as to the health of the crew during the voyage, particularly with respect to the occurrence of Diarrhoea or other bowel complaint.

The accompanying map illustrates the progress of the present Pandemic from its origins in the East, up till the present time.

Plague.

This disease was prevalent in those centres which it occupied during the preceding years, but did not obtain a footing in any fresh centres of importance.

In the Far East, Amoy suffered severely from Plague, which was epidemic in various other centres in China, but the information available was scanty. Kobe, where it first appeared in 1899, and certain other Japanese ports, as well as Saigon, Bangkok and other Indo-Chinese towns were affected, but not to a grave degree.

In India Plague still continues to carry off large numbers, especially in the Punjaub, and the United Provinces. The ports of Karachi, Bombay, Calcutta and Rangoon were regarded as infected throughout the year, and all vessels were subjected to medical examination.

Plague was epidemic in Jeddah during the first quarter of last year, causing the Haj to be declared infected. The arrangements for preventing the carriage of disease by pilgrims returning from Mecca by the Hedjaz Railway appears to be working well. Plague has reappeared at Jeddah in December. Plague is still present in the provinces of Egypt, sporadic cases also occurring at Port Said and Alexandria.

A fresh endemic centre of Plague has been discovered in the Khirghiz Steppes bordering on the Caspian Sea. Numerous extremely fatal outbreaks have been described as occurring in the course of the last decade, all arising locally. A fresh outbreak was signalled in December in the Astrakhan and Uralsk Districts. Sporadic cases occurred in St. Petersburg and Libau.

Sporadic cases in Sydney, N.S.W., and various centres in Asia Minor where Plague has previously recurred, serve to show the difficulty in eradicating the disease, once it has become established amongst the

rodents in the district. This is further shewn in California, where Plague has become endemic amongst ground squirrels and other rodents, from which it is occasionally acquired by man.

At Guayaquil a very considerable number of cases have occurred, whilst smaller numbers have been reported from Callao, Iquique, Mejillones, Antofagasta and other ports on the Peruvian and Chilian littoral. A steady continuance of the disease was reported from Rio de Janeiro and Bahia. To a less extent it prevailed at intervals at Santos, Pernambuco, Para and Maranham. Several vessels arriving at various Continental Ports from the River Plate were reported to have Plague either amongst human beings or rats.

No cases of Plague occurred on board any vessel bound for Liverpool during the year. During the year Rats were caught on board vessels from infected ports, and also from the dock sheds, and were forwarded to the Corporation Bacteriologist. 2,509 Rats were examined in this way, and all proved healthy. In the great majority of cases they belonged to the species *Mus Rattus* or Black Rat, or to the nearly allied species *Mus Alexandrinus*.

329 Rats examined for the purpose proved to be:—

	Male.				Female.				Total.
<i>Mus Rattus</i>	61	...	...	...	168	...	...	...	229
<i>Mus Alexandrinus</i> ...	26	...	...	...	72	...	...	...	98
<i>Mus Norvegicus</i> ...	1	...	...	...	1	...	...	...	2
	<hr/> 88				...	...	...	...	<hr/>329
	<hr/>				<hr/> 241	...	...	...	<hr/>

14 of the females were pregnant, containing 94 embryos, or an average of 7. The greatest number of embryos in one pregnancy was 11. As a female rat is capable of having three or four litters in the course of a year and matures in a few months, it will be readily recognised that they are capable of multiplying at a very rapid rate.

Yellow Fever.

Some of the most striking instances of the beneficial results accruing from administrative control of disease by preventive methods are afforded by the efforts directed against Yellow Fever, notably in Cuba and Rio de Janeiro. Nevertheless this disease continues prevalent in certain

places in Mexico, Equador and Brazil. Seven cases occurred on board the steamship "Lanfranc," on the voyage from Manaos to Liverpool, four of which proved fatal, the remainder being landed abroad. On the arrival of the vessel at Liverpool, all were well on board.

Infectious Disease.

During the year vessels coming from the above-mentioned Cholera and Plague-infected ports were subjected to examination by the Medical Officers for Tidal purposes

Sixty-six other vessels were also visited on account of sickness of an infectious or suspicious nature.

Smallpox.

Twenty-two cases were reported in connection with Liverpool-bound vessels, of these three were sick on arrival in Liverpool, one developed the sickness subsequent to arrival, and eighteen were landed abroad from Liverpool-bound vessels. Two suspected cases were also removed to the Port Hospital for observation but proved non-infectious.

The source of origin of the disease was :—

British India.....	15 cases on board 8 vessels.
Smyrna	3 „ „ 3 „
United States of America ...	1 „ „ 1 „
Canada	2 „ „ 2 „
Turkey	1 „ „ 1 „

There were 374 persons on board the above vessels who were vaccinated or re-vaccinated by the Medical Officers engaged in tidal duty. The names and addresses of contacts were in all cases obtained and forwarded to the districts of destination.

Phthisis.

Twenty-six cases of Tuberculosis were reported to the Authority during the year. These cases no doubt only represent a small fraction of those occurring amongst the seafaring population. Whenever Phthisis or

Consumption was reported as occurring, disinfection was carried out by, or under the supervision of the Port Sanitary Inspectors. On the larger vessels cases occurring amongst the passengers are frequently isolated in the ship's hospital, and it is more generally becoming recognised that this is a disease of an infective and transmissible nature.

Enteric Fever.

Thirty-three cases of Enteric Fever occurred on Liverpool-bound vessels and were treated in the Liverpool Hospitals, the number being the same as in the previous year. Other cases were removed to hospital abroad or died and were buried at sea, whilst others were certified as convalescent and fit to proceed. The number of disinfections carried out, therefore, is greater than of the vessels bringing in actual cases. As in previous years the River Plate and Gulf of Mexico were the sources of the majority of cases, but a severe epidemic at Montreal supplied a number later on in the year.

In all cases the character of the water supply is inquired into and the water tanks emptied and cleansed, besides the routine disinfection for infectious sickness.

TABLE 1.

ENTERIC FEVER IMPORTATIONS DURING 1909.

Date.	Ship.	From.	Number of Patients.
Jan. 7	Highland Enterprise ...	Buenos Ayres ...	Cook and Fireman(2)
,, 27	Rogaland ...	Copenhagen ...	Fireman
,, 30	Burgundy ...	River Plate ...	Fireman
Feb. 20	Lena Petersen ...	Valencia ...	Seaman and Fireman
March 26	Gascony ...	River Plate ...	2 members of Crew
April 7	Barbadian ...	Galveston... ..	3rd Officer
,, 13	Cedric ...	New York ...	Engineer
May 14	Empress of Ireland ...	Quebec ...	Seaman
,, 19	Albanian ...	Pensacola... ..	4th Engineer

TABLE 1.

ENTERIC FEVER IMPORTATIONS DURING 1909.—*Continued.*

Date.		Ship.			From.			Number of Patients.
July	7	Raeburn	...	...	River Plate	...	...	2 members of Crew
,,	12	Empress of Ireland	...	...	Montreal	...	...	Passenger
,,	15	Orissa	...	...	S. America	...	...	Seaman
,,	22	Pegu	...	...	Rangoon	...	...	Passenger
Aug.	24	Megantic	...	...	Quebec	...	...	Steward
,,	31	Venetian	...	...	Alexandria	...	...	1st Officer
Sept.	4	Merion	...	...	Montreal	...	...	Steward
,,	8	Shropshire	...	...	Rangoon	...	...	Lascar
,,	9	Falaba	...	...	W. Coast of Africa	...	...	Passenger
,,	14	Lusitania	...	...	New York	...	...	Seaman
,,	26	Candidate	...	...	Mobile	...	...	Fireman
,,	26	Albanian	...	...	Galveston	...	...	Seaman
,,	25	Victorian	...	...	Montreal	...	...	Steward
Oct.	9	Author	...	...	Savannah	...	...	Seaman
,,	25	Brookby	...	...	Wilmington	...	...	Seaman
,,	25	Indore	...	...	Galveston	...	...	Seaman
Nov.	30	Camoens	...	...	River Plate	...	...	5 members of Crew
Dec.	7	Mauretania	...	...	New York	...	...	3rd Officer
,,	8	Alexandria	...	...	Alexandria	...	...	Steward and Quartermaster
,,	12	Volpone	...	...	Llanelly	...	...	Seaman
,,	13	Barbadian	...	...	New Orleans	...	...	Steward
,,	29	Civilian	...	...	Galveston	...	...	Steward

Consular Health Certificates.

During the year the demand for certificates indicating the freedom of the City from quarantinable infectious sickness showed a slight increase, the number of certificates of this character issued to merchants and shipowners for various Consular purposes during 1909 being 384.

TABLE 2.

INFECTIOUS DISEASE.

The actual number of cases of infectious sickness landed from vessels arriving in the Port of Liverpool during the years 1908 and 1909, and the comparison with the average of the preceding 10 years, is shown in the following Table:—

Disease.	Number of Cases.		Average for the 10 years preceding 1908.
	1908.	1909.	
Smallpox	5	4	12·5
Scarlatina	17	27	8·7
Typhus Fever	0	0	0·6
Enteric Fever	33	33	33·4
Diphtheria.....	8	4	5·1
Measles	20	16	17·2
Whooping Cough	0	0	0·4
Erysipelas	4	3	5·2
Chicken Pox	6	11	5·0
Cholera and Choleraic Diarrhœa .	0	0	0·0
Yellow Fever.....	1	0	0·2
Plague	3	0	1·1
Suspected Plague	5	14	4·2
German Measles	0	0	0·9
Puerperal Fever	0	0	0·2
Parotitis	0	0	1·8
Totals	102	112	96·5

TABLE 3.

INFECTIOUS DISEASE.

The number of cases of infectious sickness reported to have occurred on Liverpool-bound ships during the years 1908 and 1909, and which were disposed of prior to the arrival of the vessel at this port, and the average of such cases for the preceding 10 years, are as follows:—

Disease.	Number of Cases.		Average for the 10 years preceding 1908.
	1908.	1909.	
Smallpox	8	18	11·0
Scarlatina	0	2	0·9
Typhus Fever	0	0	0·2
Enteric Fever	23	12	9·1
Diphtheria.....	2	3	1·5
Measles	10	3	5·8
German Measles	1	0	0·2
Erysipelas	0	0	0·2
Chicken Pox	3	18	0·9
Cholera and Choleraic Diarrhœa..	4	0	1·1
Yellow Fever	8	7	4·4
Plague	0	0	1·1
Suspected Plague.....	0	4	0·9
Totals.....	59	67	37·3

TABLE 4.

The following table shows the number of disinfections carried out after infectious disease or as a precautionary measure during the year 1909.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Smallpox	1	...	...	...	...	2	1	...	1	1	...	2	8
Scarlet Fever .....	...	...	2	...	...	1	1	...	1	...	2	1	8
Yellow Fever.....	...	...	...	...	...	1	...	...	...	...	...	...	1
Enteric Fever	4	...	1	2	1	...	4	2	7	3	1	5	30
Diphtheria .....	...	...	...	1	1	1	...	1	...	...	1	...	5
Measles .....	...	...	2	4	3	5	1	...	1	...	1	1	18
Suspected Plague.....	...	...	1	1	...	...	2	1	2	1	1	...	9
Erysipelas .....	...	...	...	...	...	2	...	...	...	...	1	...	3
Chicken Pox .....	...	1	...	1	...	2	...	1	1	...	1	1	8
Beri-Beri .....	...	...	1	...	...	...	...	...	...	...	...	...	1
Anthrax .....	...	...	...	...	1	...	...	...	...	...	...	...	1
Phthisis	4	1	2	2	...	4	3	...	1	...	1	...	18
Total	9	2	9	11	6	18	12	5	14	5	9	10	110

Anthrax.—There has been a marked diminution in the number of cases of this disease arising from imported materials during the past two years.

An increased knowledge of the disease and the channels of infection amongst those who handle imported animal products has no doubt tended to this result; in addition, a lessened prevalence of the disease abroad has contributed to the decrease.

The following table gives the cases which have occurred during the year, and it will be seen that the majority occur amongst those who handle infected animal products in the docks or neighbourhood.

TABLE 5.
CASES OF ANTHRAX REPORTED TO THE AUTHORITY
DURING THE YEAR 1909.

Date 1909.	Sex.	Occupation.	Material.	Origin of Material.	Situation of Pustule.	Severity ¹ and Result.	Information Obtained.
Feb. 25	M.	Labourer ...	Patent Manure	Unknown ...	Throat	Death	No gloves provided, shovels used.
Mar. 11	M.	Dock Labourer	Dry goat skins	Bombay ...	Neck	Excision and recovery	Gloves and over-all provided but seldom used by employees.
Apl. 28	M.	Dock Labourer	Buffalo hides	Calcutta ...	Neck	Excision and recovery	No gloves provided.
June 17	M.	Porter	Unknown ...	Unknown ...	Left Cheek	Excision and recovery.	
July 20	M.	Dock Labourer...	Hides.....	Leghorn ...	Groin	Excision and recovery	No gloves provided;
Sept. 29	M.	Wool Porter	Wool	East Indian	Right Cheek	Excision and recovery	Early attention to treatment. No gloves provided.
Oct. 2 ...	M.	Carter	Dry hides ...	W. Africa	Cheek	Death	Gloves supplied.
Dec. 5 ...	M.	Dock Labourer	Unknown ...	Unknown ...	Neck	Excision and recovery	Gloves provided.

The following Table gives the particulars of the 108 vessels on board, with the measures adopted in each case :—

TABLE 6.

Date 1909.	Name of Vessel.	Where from.	Nature of Sickness.	Hospital to which Patient was removed.
Jan. 7	Highland Enterprise	Buenos Ayres	Enteric Fever	Netherfield Road
Jan. 15	City of Calcutta	Glasgow ...	Suspected Small-pox	New Ferry ...
Jan. 18	Highland Enterprise	Buenos Ayres	Enteric Fever	Netherfield Road
Jan. 27	Rogaland ...	Copenhagen	Enteric Fever	Royal Southern
Jan. 30	Burgundy ...	River Plate ...	Enteric Fever	Grafton Street..
Feb. 20	Lena Petersen	Valencia ...	Enteric Fever (2 cases)	... ..
Feb. 23	Historian ...	Calcutta ...	Chicken-pox (6 cases)	New Ferry ...
Mar. 8	Baltic ..	New York ...	Measles ...	... ..
Mar. 16	Lusitania ...	New York ...	Scarlatina ...	Fazakerley ...

reported on their arrival as having, or having had, Infectious Disease

REMARKS.

The patient, a cook on this vessel, was removed to Hospital and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

One of the crew of this vessel (a Lascar) who was suffering from symptoms suspicious of Smallpox was removed to the Port Hospital for observation, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The sickness proved to be non-infectious.

A Fireman, one of the crew, who had gone to his home, 22, Idris Street, in the City, developed the disease and was removed to Hospital.

The patient, one of the crew (a Fireman) was removed to Hospital and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

One of the crew (a Fireman) suffering from Enteric Fever, was removed to the City Hospital, Grafton Street, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

This vessel being bound for Manchester, the patients, a Seaman and a Fireman, proceeded with the vessel to that port. Notice was sent to the Medical Officer.

Six of the crew of this vessel (Lascars) who were suffering from Chickenpox were removed to the Port Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The patient, a child, being convalescent and free from infection was allowed to proceed. The vessel and bedding were disinfected by the Port Sanitary Officers and City Staff.

The patient, a saloon passenger, was removed to the City Hospital, Fazakerley, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

Date 1909.	Name of Vessel.	Where from.	Nature of Sickness.	Hospital to which Patient was removed.
Mar. 22	Cheshire ...	Rangoon ...	Small-pox ...	... ..
Mar. 23	Celtic ...	New York ...	Measles ...	Fazakerley ...
Mar. 26	Gascony ...	River Plate...	Enteric Fever (2 cases)	Grafton Street
Mar. 27	Virginian ...	Halifax ...	Scarlatina ...	... ..
Mar. 27	Elysia ...	Bombay ...	Suspected Plague	New Ferry ...
April 4	Chancellor ...	Rangoon ...	Suspected Plague	New Ferry ...
April 5	Anselm ...	Para ...	Measles ...	... ..
April 6	Worcester- shire	Rangoon ...	Small-pox .. (2 cases)	... ..
April 7	Barbadian ...	Galveston ...	Enteric Fever	Grafton Street
April 13	Cedric ...	New York ...	Enteric Fever	Netherfield Road

REMARKS.

One of the native crew of this vessel suffering from Smallpox was landed at Suez on the homeward passage, Disinfection being carried out at that port.

The patient, a saloon passenger, was removed to the City Hospital, Fazakerley, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

Two of the crew suffering from Enteric Fever were removed to Hospital and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The patient, a child passenger, died and was buried at sea on the homeward passage. Disinfection of the vessel, bedding, &c., being carried out on arrival in this Port.

One of the native crew having symptoms suspicious of Plague was removed to the Port Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The sickness proved to be non-infectious.

Three of the crew of this vessel who were suffering from symptoms suspicious of Plague were removed to Hospital for observation, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff. The sickness proved to be non-infectious.

The patient, a child passenger, was removed to her home in a private ambulance. The vessel and bedding being disinfected by the Port Sanitary Officers and City Staff.

Two of the Lascar crew of this vessel who were suffering from Smallpox were landed at Suez on the passage homeward, where disinfection of the vessel was carried out.

The patient, the 3rd Officer, was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The patient, an Engineer, was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

Date 1909.	Name of Vessel.	Where from	Nature of Sickness.	Hospital to which Patient was removed.
April 14	Patrician ...	Calcutta ...	Small-pox (3 cases)	... ..
April 26	Olympia ...	Bombay ...	Chicken-pox	... ..
April 27	Ava	Rangoon ...	Chicken-pox	... ..
April 27	Dominion ...	Montreal ...	Scarlatina ...	Mill Lane ...
April 28	Campania ...	New York ...	Measles ...	Park Hill ...
April 29	City of Glasgow	Bombay ...	Chicken-pox	... ..
April 30	Empress of Britain	Quebec ...	Measles ...	Park Hill ...
April 30	Saxonia ...	Boston ...	Measles ...	... ..
May 13	Ivernia ...	Boston ...	Diphtheria ...	Fazakerley ...
May 13	Clan Campbell	Cape Town ...	Chicken-pox (8 cases)	... ..

REMARKS.

Three of the native crew, suffering from Smallpox, were left in Hospital at Colombo on the homeward passage, where disinfection was carried out.

One of the passengers suffering from Chicken-pox was landed at Marseilles on the homeward passage. The vessel was disinfected by the crew.

One of the native crew had suffered from Chicken-pox during the passage home. The vessel was disinfected by the crew.

The patient, a passenger, was removed to the City Hospital and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The patient was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

One of the native crew suffered from Chicken-pox on the outward passage. Disinfection carried out by the crew.

One of the passengers suffering from Measles was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The patient being convalescent and free from infection was allowed to proceed. The usual disinfection was carried out at this port.

The patient, a steerage passenger, was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

Eight of the native crew had suffered from Chicken-pox during the homeward passage. Disinfection was carried out by the ship's crew.

Date 1909	Name of Vessel.	Where from.	Nature of Sickness.	Hospital to which Patient was removed.
May 14	Empress of Ireland	Quebec ...	Enteric Fever	Netherfield Road
May 19	Albanian ...	Penscola ...	Enteric Fever	... ..
May 20	Baron Ardrossan	Bombay ...	Small-pox ...	... ..
May 25	Cedric ...	New York ...	Measles ...	... ..
May 29	Princess Louise	Glasgow ...	Scarlatina ...	Park Hill ...
May 29	Empress of Britain	Quebec ...	Diphtheria ...	Mill Lane ...
May 26	Bhamo ..	Rangoon ...	Small-pox ...	... ..
May 28	Saxonia ...	Boston ...	Measles ..	... ..
May 31	Baltic ...	New York ...	Measles ...	Grafton Street ..
June 1	Mauretania ...	New York ...	Chicken-pox	Fazakerley ...

REMARKS.

The patient, a seaman, was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The patient, the 4th Engineer, proceeded with the vessel to Manchester, the Authorities at that Port being notified.

One of the native crew, suffering from Smallpox, was left in Hospital at Colombo on the home passage. Disinfection carried out by the ship's Officers.

The patient, a Steward, being convalescent and free from infection was allowed to proceed. The usual disinfection was carried out.

The patient was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The patient was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

One of the native crew, suffering from Smallpox, was landed at Colombo, where disinfection was carried out.

The patient, a passenger, had suffered from Measles during the voyage, but was convalescent and free from infection on arrival and was allowed to proceed. The usual disinfection was carried out.

The patient, a passenger, was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The patient was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

Date 1909.	Name of Vessel.	Where from.	Nature of Sickness	Hospital to which Patient was removed.
June 2	Carmania ...	New York ...	Scarlatina ...	... ..
June 3	Lanfranc ...	Manaos and Para	Yellow Fever	... ..
June 9	Campania ...	New York ...	Erysipelas ...	Fazakerley ...
June 14	Celtic ...	New York ...	Measles ...	Park Hill ...
June 14	Caronia ..	New York ...	Erysipelas ...	Fazakerley ...
June 19	Virginian ...	Montreal	Small-pox ..	... ..

REMARKS.

The patient, a lady saloon passenger, developed the disease after arrival, and was removed to private apartments for nursing. Vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

This vessel on arrival reported having had seven cases of Yellow Fever on the homeward voyage. On May 9th the Barber and a Steward were landed at Manaos, suffering from this disease, on the 13th a Steward was taken sick and landed at Para. The Second Engineer died on May 20th, and another Steward on May 22nd, both being buried at sea. On the 20th May two First Class Passengers were taken ill with Yellow Fever and were landed on the 29th at Lisbon, being then convalescent. On arrival the passengers and crew, numbering 234, were medically examined and found to be free from any infectious sickness. As the vessel had been disinfected the passengers were allowed to land, and the vessel proceeded to dock. The names and addresses of all on board was obtained. A further disinfection of the the affected quarters of the ship and all bilges was carried out.

The patient was removed to Hospital, and the disinfection of the vessel and bedding carried out by the Port Sanitary Officers and City Staff.

The patient, a passenger, was removed to Hospital and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The patient, a saloon passenger, was removed to Hospital, and disinfection carried out by the Port Sanitary Officers and City Staff.

This vessel arrived in the Port on June 19th. On the outward passage, on the 2nd June, Mrs. Herter, a steerage passenger from Libau was taken ill with Smallpox, and was isolated with her family. On arrival in the St. Lawrence all on board were vaccinated, 271 passengers and 27 of the crew quarantined, and the forward steerage quarters and Hospitals disinfected. The vessel left Montreal on June 11th, and on the 13th James McFee, Assistant Baker, developed the rash of Smallpox and was isolated, together with the Steward who attended on him. On arrival of the vessel in Liverpool she was medically inspected, and all persons who had been in contact with McFee and had not been successfully vaccinated (numbering 70) were vaccinated before leaving the vessel. The patient and a Steward were removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

Date 1909.	Name of Vessel.	Where from.	Nature of Sickness.	Hospital to which Patient was removed.
June 21	Canada ...	Montreal ...	Small-pox ...	New Ferry ...
June 24	Saxonia ...	Boston ...	Measles ...	Fazakerley ...
June 27	Laurentic ...	Montreal ...	Measles ...	... ..
June 29	Pondo ...	Bombay ...	Suspected Plague	New Ferry ...
July 6	Cymric ...	Boston ...	Scarlatina ...	... ..
July 7	Raeburn ...	River Plate ...	Enteric Fever (2 cases)	Grafton Street .
July 12	Empress of Ireland	Montreal ...	Enteric Fever	Grafton Street ..
July 15	Massilia ...	Bombay ...	Suspected Plague	New Ferry ...

REMARKS.

This vessel left Montreal on 12th June, and on the 13th Daniel Cook, a Second Class Passenger, travelling from Utah, where Smallpox is prevalent, developed the disease and was isolated on the poop, together with two passengers from the same berth; they were attended by two Stewards who were isolated on the poop. Six immediate contacts were at once vaccinated. On arrival in Liverpool the vessel was visited, and all on board medically inspected. 101 Passengers and all the 2nd Class Stewards were re-vaccinated. The patient and all immediate contacts were removed to the Port Hospital in the ship's boat. Twenty-nine Second Class passengers who had travelled from Utah in company with Cook and who had been in close contact were also removed to Hospital in the Quarantine Tug for observation. A family of eight persons, six of whom were entirely unvaccinated, were kept under close observation in the City. Disinfection of the vessel and bedding was carried out by the Port Sanitary Officers and City Staff. There was no extension of the disease.

The patient was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The case being convalescent and free from infection was allowed to proceed. Usual disinfection.

One of the Seamen having a suspicious Bubo was removed to Hospital for observation, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff. The sickness proved to be non-infectious.

The patient being convalescent and free from infection was allowed to proceed. Disinfection of the vessel and bedding was carried out by the Port Sanitary Officers and City Staff.

The patients, two of the crew, were removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The patient, a passenger, was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

One of the native crew, a Seaman, having a suspicious Bubo was removed to the Port Hospital for observation. Complete disinfection was carried out by the Port Sanitary Officers and City Staff. The case was not one of Plague.

Date 1909.	Name of Vessel.	Where from.	Nature of Sickness.	Hospital to which Patient was removed.
July 15	Orissa ...	South America	Enteric Fever	Grafton Street ..
July 15	City of Glasgow	Bombay ...	Suspected Plague	New Ferry ...
July 22	Pegu ...	Rangoon ...	Enteric Fever	... ..
July 24	Ortega ...	South America	Measles ... (3 cases)	... ..
July 24	Empress of Britain	Montreal ..	Small-pox (?)	New Ferry ...
Aug. 3	Walton Hall	Karachi ...	Suspected Plague	New Ferry ...
Aug. 11	Persic ...	Australia ...	Chicken-pox (6 cases)	... ..
Aug. 14	Circassia ...	Bombay ...	Enteric Fever	Netherfield Road
Aug. 19	Saxonia ...	Boston ...	Diphtheria ...	Mill Lane ...
Aug. 24	Megantic ...	Quebec ...	Enteric Fever	Netherfield Road

REMARKS.

The patient was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

Two members of the crew having symptoms suspicious of Plague were removed to the Port Hospital for observation, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff. The cases were not Plague.

The patient, a Saloon Passenger, convalescent on arrival, was allowed to proceed. Disinfection of the vessel and bedding was carried out by the Port Sanitary Officers and City Staff.

Three passengers suffering from Measles were landed at Vigo on the homeward passage. Vessel being disinfected by the crew.

A Steerage Passenger and five contacts were removed to the Port Hospital for observation, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff. The sickness proved to be not Smallpox.

One of the Lascar crew having symptoms suspicious of Plague was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff. The case proved to be not one of Plague.

The patients, all passengers, were landed prior to arrival in this Port, two at Plymouth, and four at London—where disinfection of the vessel was carried out.

The patient was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

One of the Stewards, who was suffering from Diphtheria, was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The patient, a steward, was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

Date 1909.	Name of Vessel.	Where from.	Nature of Sickness.	Hospital to which Patient was removed.
Aug. 25	Indefatigable (training ship)	in the River Mersey	Diphtheria ...	Park Hill ...
Aug. 30	Crewe Hall ...	Bangkok ...	Suspected Plague	... ..
Aug. 31	Venetian ...	Alexandra ...	Enteric Fever	... ..
Sept. 3	St. Irene ...	Conception ...	Scarlatina ... (2 cases)	Grafton Street..
Sept. 4	Merion ...	Montreal ...	Enteric Fever	Netherfield Road
Sept. 8	Shropshire ...	Rangoon ...	Enteric Fever	Grafton Street...
Sept. 9	Falaba ...	West Africa	Enteric Fever	Southern ...
Sept. 11	Avala ...	Karachi ...	Suspected Plague	New Ferry
Sept. 14	Lusitania ...	New York ...	Enteric Fever	Netherfield Road
Sept. 15	Peleus ..	Yokahama ...	Suspected Plague	New Ferry ...

REMARKS.

The patient, one of the Boys, was brought ashore and removed to the City Hospital, Park Hill, the vessel being disinfected by the ship's Officers.

One of the native crew, suspected to be suffering from Plague, was landed and taken into Hospital at Port Said on the homeward passage. Disinfection was carried out at this port.

The Chief Officer of this vessel developed Enteric Fever after arriving at his home at Waterloo. Disinfection carried out by the Port Authority.

The patients, two Apprentices, were removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The patient, one of the Stewards, who had gone to his home, was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

One of the native crew, suffering from Enteric Fever, was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The patient, a passenger, was admitted to the Royal Southern Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

One of the Lascar crew having symptoms suspicious of Plague was removed to the Port Hospital for observation. Disinfection of vessel and bedding was carried out by the Port Sanitary Officers and City Staff.

The patient, a Seaman, was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The patient, one of the crew, was removed to the Port Hospital for observation. Usual disinfection carried out. The sickness was not plague.

Date 1909.	Name of Vessel.	Where from.	Nature of Sickness.	Hospital to which Patient was removed.
Sept. 16	Anchises ...	Java ...	Beri-Beri ... (2 cases)	... ..
Sept. 19	Persian ...	Smyrna ...	Small-pox ...	New Ferry ...
Sept. 20	Hermione ...	River Plate ...	Enteric Fever	... ..
Sept. 20	Carmania ...	New York ...	Measles ...	... ..
Sept. 21	Mauretania ...	New York ...	Chicken-pox	... ..
Sept. 24	Albanian ...	Galveston ...	Enteric Fever	Grafton Street..
Sept. 25	Victorian ...	Montreal ...	Enteric Fever	Netherfield Road
Sept. 26	Candidate ...	Mobile ..	Enteric Fever	Netherfield Road
Sept. 29	Campania ...	New York ...	Chicken-pox	New Ferry ...
Oct. 9	Author ...	Savana ...	Enteric Fever	Netherfield Road

REMARKS.

Two of the Chinese Firemen were isolated on board and a Doctor in attendance.

The 3rd Engineer, who was suffering from Smallpox, was landed at Lisbon on the homeward passage. On arrival in this Port the crew were re-vaccinated and the three of them removed to the Port Hospital for observation. None of these developed the disease. Vessel and bedding disinfected.

The patient, one of the crew, died on the passage home. On arrival his effects and the vessel were disinfected by the Port Sanitary Officers and City Staff.

On arrival the patient, a Saloon passenger, was removed to private apartments for nursing. Usual disinfection being carried out.

The patient, a Saloon Passenger, removed to private apartments for nursing, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The patient removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The patient was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The patient, a Steward, was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The patient, a child passenger, and the mother were removed to the Port Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The patient was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

Date 1909.	Name of Vessel	Where from.	Nature of Sickness.	Hospita to which Patient was removed.
Oct. 12	Caronia ...	New York ...	Small-pox ...	New Ferry ...
Oct. 18	City of Glasgow	Karachi ...	Suspected Plague	New Ferry ...
Oct. 25	Brookby ...	Wilmington	Enteric Fever	Netherfield Road
Oct. 25	Indore ...	Galveston ...	Enteric Fever	Grafton Street..
Oct. 28	Busiris	Constantinople	Small-pox ...	New Ferry ...
Nov. 1	Corsican ...	Montreal ...	Chicken-pox	Fazakerley ...
Nov. 2	Lusitania ...	New York ...	Scarlatina ...	Grafton Street..
Nov. 8	Arlington ...	San Nicholas	Enteric Fever ...	... ..
Nov. 12	Empress of Britain	Quebec ...	Scarlatina ...	Netherfield Road

REMARKS.

This vessel arrived in the Port on the 3rd October and all were reported well on board. The patient, a Steward, contracted infection in New York and developed the disease after proceeding to his home in the City. He was removed to the Port Hospital, and all contacts at his home re-vaccinated.

One of the native crew, who was suffering from symptoms suspicious of Plague, was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff. The sickness did not prove to be Plague.

The patient was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The patient, a Seaman, was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The patient, a Second Class Passenger, and two contacts were removed to the Port Hospital, New Ferry, and twenty-five of the passengers and crew re-vaccinated. The names and places of destination of all on board was obtained and forwarded to the districts to which they were proceeding. Disinfection of the vessel and bedding was carried out by the Port Sanitary Officers and City Staff. There was no extension of the disease.

The patient, a Steerage Passesger, was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

A child Passenger, who was suffering from Scarlatina, was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The patient, one of the crew, a Fireman, died and was buried at sea on the homeward passage. Usual disinfection was carried out.

The patient was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

Date, 1909.	Name of Vessel.	Where from.	Nature of Sickness.	Hospital to which Patient was removed.
Nov. 13	Baltic ...	New York ...	Measles ...	Fazakerley ...
Nov. 23	Crewe Hall ...	Karachi ...	Suspected Plague	New Ferry ...
Nov. 27	Corsican ...	Montreal ...	Scarlatina ..	Park Hill ...
Nov. 27	Mary Ann ... (Barge)	... ..	Erysipelas ...	Fazakerley ...
Nov. 30	Camoens ...	River Plate <i>via</i> New York for Manchester	Enteric Fever (4 cases)	... ..
Dec. 3	Cherbourg ...	Constantinople &c.	Small-pox ...	... ..
Dec. 3	Camoens ...	New York ...	Enteric Fever	Grafton Street..
Dec. 7	Mauretania ...	New York ...	Enteric Fever	Grafton Street..
Dec. 8	Alexandria ...	Alexandria ...	Enteric Fever (2 cases)	Netherfield Road

REMARKS.

The patient was removed to the Fazakerley Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

One of the Lascar crew having symptoms suspicious of Plague was removed to the Port Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff. The Case did not prove to be Plague.

The patient, a Third Class Passenger, was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

The Master of this barge, who was suffering from Erysipelas, was removed to the City Hospital at Fazakerley. The barge was disinfected by the Port Sanitary Officers.

One of the Stewards died from Enteric Fever in New York, three other members of the crew suspected of having the disease proceeded with the vessel to Manchester.

This vessel arrived in Liverpool on the 18th November from Constantinople, Smyrna and Algiers, and reported all well. On December 2nd information was received that one of the crew was suffering from Smallpox at his home in Great Crosby, having been ill since November 25th. The vessel and bedding were disinfected, the crew of the vessel as far as possible traced, and their addresses forwarded to the respective Authorities, but most of them had already sailed from the Port on other vessels.

One of the Firemen of this vessel, who had gone to his home in the City, developed the disease and was removed to Hospital.

The patient, the 3rd Officer, was removed to the City Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

Two of the crew, a Steward and a Quartermaster, who were suffering from Enteric Fever, were removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

Date, 1909.	Name of Vessel.	Where from.	Nature of Sickness.	Hospital to which Patient was removed.
Dec. 11	Mendi ...	Lagos, &c. ...	Small-pox ...	New Ferry ...
Dec. 12	Volponé ...	Llanelly . .	Enteric Fever	Northern ...
Dec. 12	Baltic ...	New York ...	Chicken-pox	Fazakerley ...
Dec. 13	Barbadian ...	New Orleans	Enteric Fever	Bootle
Dec. 15	Indefatigable (training ship)	in the River	Scarlatina ... (16 cases)	Park Hill ...
Dec. 21	Highland Heather	River Plate...	Enteric Fever	... ...
Dec. 28	Mauretania ...	New York ...	Measles ... (2 cases)	Fazakerley ...
Dec. 29	Civilian ...	Galveston ...	Enteric Fever	Grafton Street ..

REMARKS.

This vessel arrived in Liverpool on the 11th December from Plymouth, where she landed a First Class Passenger from Lagos suffering from Smallpox, together with 59 first and second class passengers. The patient had been ill since the 4th December. Five of the patient's family were removed to the Port Hospital, and 17 passengers and 49 of the crew vaccinated or re-vaccinated on arrival here. All infected rooms, bedding and clothing were disinfected by the Port Sanitary Officers and the City Staff.

The patient, a Seaman, was admitted to the Northern Hospital, the vessel, bedding, &c., being disinfected by the Port Sanitary Officers and the City Staff.

The patient, a Passenger, was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and the City Staff.

One of the crew of this vessel who was suffering from Enteric Fever was removed to Hospital from his home in Bootle.

Seventeen Boys suffering from Scarlatina were removed from the ship in the river to the City Hospital, Park Hill. Disinfection of the vessel and bedding being carried out by the ship's Officers.

The patient, a Seaman, died and was buried at Las Palmas on the homeward passage. Disinfection of deceased seamen's effects and quarters was carried out.

The patients, two Children Passengers, were removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and the City Staff.

The patient, a Steward, was removed to Hospital, and the vessel and bedding disinfected by the Port Sanitary Officers and City Staff.

Diseases incident on Sailors.—Sanitation of Vessels.

The diseases to which sailors are peculiarly liable fall under four headings:—

(a) Those which are caused by the peculiar stresses of the work, the liability to Hernia and Aneurism of Sailors, and “Firemen’s Frenzy.”

(b) Those attending the vices to which sailors in foreign ports are particularly subject, Alcoholism and Venereal Diseases.

(c) Tropical Diseases, including Malaria, Beri-Beri, Plague and Cholera.

(d) Those associated with the peculiar environment of the sailor, such as Rheumatism—the “Sailor’s Curse”—due to defective and damp forecastles; Enteric Fever and Dysentery, often associated with water contaminated either before or after being placed in the ships’ fresh water tanks, and in other cases due to the close association of the sick with the healthy in the confined quarters on ship-board; Phthisis due to deficient lighting and ventilation, and the opportunity for easy infection.

It is against these latter classes of disease that the efforts of the Port Sanitary Authority are directed by improving the sanitation of vessels.

The defects are classified under three headings, those arising from—

- (a) Faulty construction,
- (b) Wear and tear,
- (c) Lack of cleanliness, and nuisance.

The area of the Port is divided into three districts, those of the North Docks, the South Docks, and the outlying districts comprising Birkenhead and Garston. These are each in charge of an inspector who is fully qualified, both by examination, and for the most part by previous sea-going experience. These visit all vessels lying within their district to examine into their sanitary state, and also to enquire concerning the health of those on board, and during the voyage, particularly stringent enquiries being made in the case of all vessels from Ports where Plague, Cholera or Smallpox are prevalent.

The Inspectors report daily to the Assistant Port Medical Officer.

INSPECTION OF SHIPPING.

Year 1909.

TABLE 7.

The following Table indicates the number of visits paid to vessels by the Inspectors during the year :—

Nationality.		Visits.	Re-visits.	Total.
British ...	...	2,721	855	3,576
Norwegian	...	95	21	116
Swedish...	...	14	3	17
Spanish...	...	112	78	190
Danish ...	...	13	6	19
German...	...	33	9	42
Italian ...	...	1	—	1
Belgian ...	...	1	—	1
Russian ...	...	10	6	16
French ...	...	16	4	20
Dutch ...	...	4	—	4
Greek ...	...	2	—	2
Austrian ...	...	3	2	5
Argentine	...	1	—	1
		<hr/>	<hr/>	<hr/>
		3,026	984	4,010
		<hr/>	<hr/>	<hr/>

SUMMARY OF INSANITARY CONDITIONS.

TABLE 8.

Class of Vessels.	Number Inspected.	Number on which nuisances were found.	Per cent.
FOREIGN—			
Steamers	1,553	560	36·05
Sailing	80	38	47·50
Total	1,633	598	36·62
COASTWISE—			
Steamers	879	218	24·80
Sailing	514	151	29·37
Total	1,393	369	26·49

Nationality.	Number Inspected.	Number on which Nuisances were found.
British	2,721	831
Foreign	305	136
	3,026	967

Nuisances arising through

Defects of Original Construction.	Per cent. of Total Defects.	Structural Defects through wear and tear.	Per cent. of Total Defects.	Dirt, and other conditions prejudicial to health.	Per cent. of Total Defects.
46	1·99	317	13·77	1,938	84·22

TABLE 9.

THE FOLLOWING TABLE SHOWS THE NUMBER AND NATIONALITIES OF THE VESSELS ON WHICH DEFECTS WERE DETECTED DURING THE YEAR 1909.

NATIONALITY	Number of Ships.	Dirty Forecasts.	Dirty Wash houses, Store houses, etc.	Foul Water Casks.	Foul Bilges.	Foul W.C's.	Accumulations of offensive refuse.	Gear stowed in Crew's Quarters.	Pump Quarters.	Water lodging on top of Forepeak Tank.	Animals kept, causing nuisance.	Leaky Decks overhead.	Defective Stoves.	Defective Bulkheads.	Defective Ports and Sky-lights.	Defective Ventilators.	Defective Flooring Boards.	Defective Hatches and Lockers.	Defective Chain Pipes.	Defective Hawse Pipes.	Defective W.C. Fittings.	Defective Soil Pipes.	Inadequate Ventilation.	Inadequate Lighting.	Inadequate Drainage.	Bare Iron not Sheathed.	W.C's deficient in Ventilation and situation bad.	Total number of Defects.	Total Remedied.
British ...	831	1002	52	16	6	488	21	8	33	11	5	59	25	11	133	11	4	6	7	9	21	7	12	8	6	9	6	1976	1245
Norwegian ...	23	25	...	...	...	12	...	...	5	...	...	4	1	...	2	1	...	...	...	...	1	...	...	...	...	...	...	51	23
Swedish ...	7	7	...	...	...	3	...	...	...	...	2	...	...	...	1	...	...	...	...	1	...	1	...	...	...	...	...	15	11
Spanish ...	70	102	6	...	...	67	5	...	...	1	...	...	...	...	2	...	...	...	...	...	1	...	...	...	...	...	...	184	153
Danish ...	4	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	...	...	...	7	5
German ...	15	13	...	...	...	12	...	...	...	...	...	2	...	1	...	...	...	...	1	2	...	...	...	...	...	...	...	31	18
Italian ...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Russian ...	4	4	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	6	5
French ...	6	6	...	...	...	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	11	5
Greek ...	2	2	..	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	4	1
Argentine ...	1	2	4	...	...	1	1	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	10	...
Austrian	3	2	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	3
Total ...	967	1165	63	16	6	594	28	8	38	12	8	67	26	12	139	12	4	6	8	12	23	8	16	8	6	10	6	2301	1470

Canal Boats.

The Port Sanitary Inspectors have been appointed Canal Boat Inspectors, under the Canal Boat Acts of 1877 and 1884. This is rendered necessary by the large number of Canal Boats which are to be found lying in the Liverpool Docks, the Duke's Dock being entirely devoted to this class of traffic.

By rotation one Inspector devotes one day per week for a period of one month at a time, as it has been found that in this way it is easier to follow up any boat that may be defective. These boats are for the most part kept in very good repair.

Contraventions of the Acts and of the regulations made under them, include failure to register the boat; failure to have the boat clearly marked with the registered number or to produce the certificate of registration on demand; failure to keep the cabins or water-casks in good order or repair; carrying offensive cargoes insufficiently separated from the cabins; overcrowding or improper habitation; and failure to notify infectious disease.

769 boats were inspected during the year, of which number 53 were found to have some condition contravening the regulations.

Special Visits.

In addition to the daily routine inspection of the sanitation of vessels, special visits require to be made to many vessels on reports of sickness. Smallpox contacts have to be kept under daily observation. Vessels which have had on board cases of cholera, plague or smallpox left at foreign ports require visiting. Disinfection has to be carried out or supervised on all vessels which have had cases of actual or suspected infectious disease. 110 vessels were disinfected during the year, in some cases extensive precautions being required.

The Inspectors invariably inquire into the health of those on board the vessels they visit, and as to the occurrence of sickness during the voyage on board all vessels arriving from abroad. They report daily to the Assistant Port Medical Officer.

The whole time of one Inspector has been occupied in supervising the landing of cattle from coastwise cattle boats, under the provisions of the Diseases of Animals Acts, to which duties they have been specially appointed.

The Aliens Act, 1905.

An "immigrant" ship (i.e., a ship bringing more than 20 alien steerage passengers to be landed in the United Kingdom) may not land these passengers at other than immigration ports at which Immigration Officers and Medical Inspectors have been appointed and Immigration Boards have been established.

The immigration Ports are:—Cardiff, Dover, Folkestone, Grangemouth, Grimsby, Harwich, Hull, Leith, Liverpool, London (including Queenborough), Newhaven, Southampton, and the Tyne Ports.

An alien shall be considered to be an "undesirable" according to section 1 (3) of the above Act:—

- (a) If he cannot show that he has in his possession or is in a position to obtain the means of decently supporting himself and his dependants (if any); or
- (b) If he is a lunatic or an idiot, or owing to any disease or infirmity appears likely to become a charge upon the rates or otherwise a detriment to the public; or
- (c) If he has been sentenced in a foreign country, with which there is an extradition treaty, for a crime, not being an offence of a political character, which is, as respects that country, an extradition crime within the meaning of the Extradition Act, 1870; or
- (d) If an expulsion order under this Act has been made in his case; but in the case of an immigrant who proves that he is seeking admission to the country solely to avoid prosecution or punishment on religious or political grounds or for an offence of a political character, or persecution, involving danger of imprisonment or danger to life and limb on account of religious belief, leave to land shall not be refused on the ground merely of want of means, or the probability of his becoming a charge on the rates.

The alien has to prove in regard to "means" that he is the actual possessor of enough money to decently support himself and his family, and the Secretary of State has advised that the amount should be fixed at £5, with an additional £2 for each dependant, if any, accompanying him.

SUPERVISION OF FOOD IMPORTATIONS.

In submitting for consideration the work of the Food Department for the year 1909, it may be pointed out that the systematic work of inspection of imported food was only undertaken for the first time a little more than a year ago.

The Unsound Food and Foreign Meat Regulations, 1908, were issued by the Local Government Board under the Public Health (Regulations as to Food) Act, 1907, "for the purpose of preventing danger to the Public Health from the importation, preparation, storage and distribution of articles of food or drink (other than drugs or water)." The Act applies the methods of control which have so long been in successful operation with respect to infectious diseases. The Order gives Port Sanitary Authorities power to inspect food products imported into this country. Under these Regulations a staff of officers was appointed by the Liverpool Port Sanitary Authority, in January, 1909; some time, however, necessarily elapsed before the Authority was able to get the newly appointed officers at work.

Additions and alterations were made in the existing office accommodation and provision made for a dépôt and telephone facilities along the docks, so as to expedite the work.

In ordinary circumstances the inspection is carried out after the goods have been landed, but in special cases the articles may be examined before they have been discharged from the ship. Part of the work under the Regulations devolves on the Officers of Customs, and with the consent of the Commissioners, the valuable co-operation of their Officers has been obtained.

The importation of meat is mainly confined to the North Docks, and the work of inspection of meat, frozen, chilled or pickled, is allotted to the different inspectors, as circumstances require, and the inspectors frequently assist one another.

General food imports and produce, such as fruit, grain, &c., are imported in the North-Central, South and Birkenhead Docks.

The official guide to the daily imports is the Customs Bill of Entry ; meat consignments which have been detained under the Regulations by Customs Officers are first of all attended to, so as to expedite delivery. General food inspection in the sheds, however, is carried out simultaneously.

The cargo of every ship arriving in the port and containing food imports is examined, and all consignments likely to be damaged or unsound are seen by the inspectors. In addition, lists of imported goods which require special attention as regards contamination or sampling, are made out from time to time for the inspectors' use ; these chiefly consist of salvage cargoes, "inedible" products, etc. Samples of preserved goods (such as peas, beans, fish etc.) are analysed for the presence of preservatives and colouring matters which are prejudicial to health, and the presence of metallic contamination in canned goods is enquired into.

The quality of consignments of food can only be gauged by a method of sampling or an inspection of portions of the consignments ; on a preliminary sampling, if a certain degree of unsoundness is found, a further examination is made and if considered necessary the whole consignment may have to be sorted on the quays, or when circumstances require, as in the case of frozen meat, &c., permission is given to remove the goods into warehouse or cold store, where the sorting is done under the supervision of the inspectors. In this respect, it must be remembered that the City and Port of Liverpool are practically one for inspection purposes, and if goods are allowed to go for sorting into the market stores or warehouses, they still remain under the supervision of the Officers of the Authority. This has been found to be of the greatest advantage to Traders and Importers where time and storage facilities are at a premium. Frequent cross references, as regards foods, pass between the food inspectors of the City and Port. The plan saves time and greatly facilitates the work of inspection and much valuable information is obtained on both sides. In addition, the staff required to work each department is a smaller and less expensive one.

Frozen and chilled meat and mutton are imported in large quantities from North and South America, Australia and New Zealand ; the quality is generally very good, and no question arises as to its soundness, unless in cases where the refrigeration on shipboard has broken down and

consequently decomposition has set in, or when associated "moulds" have grown on the meat to such an extent as to render it also unmarketable. Carcases may also have been damaged by "brine" or other chemical substance.

Boneless or "Boxed" meats imported in the form of scrap meat, minced meat or meat without bone, are placed under Foreign Meat Class 1, and must be exported. Boneless meats of the above class have now ceased to be imported at this port; the importation of frozen or boxed meat, consisting of definite and recognised "cuts" of large size which have been imported hitherto squeezed into boxes and frozen solid, so that it was impossible to tell their origin, much less the condition of the meat, has also been stopped. This meat is now imported in definite pieces of large size and frozen in its natural state before being packed in the box, all the lymphatic glands are left in situ, so as to be readily examined by the inspector.

The Medical Officer of Health before releasing such meat satisfies himself that the following conditions are complied with:—

1. That the meat is so packed that on opening the box the pieces can be individually separated and examined as to disease.
2. That any piece can be satisfactorily identified with definite parts of the carcase which the box is stated to contain.

The examination of frozen offal occupies a large part of the time and attention of the inspectors.

Before this inspection was instituted, it was customary for this offal, such as livers, kidneys, plucks, &c., to come frozen in hard solid masses in boxes, and it was an utter impossibility to separate and examine the organs separately without thawing them out. A considerable amount of pressure was brought to bear on Importers to improve the methods of packing of this class of food imports, and it may now be said that practically the whole of the meat importers at this port, are importing frozen offal in a satisfactory form, the organs being frozen separately, enabling the inspectors to overhaul every organ as regards disease. The food inspectors have rejected large quantities of offal for diseased conditions (see table, page 60).

Frozen and boxed pork and other pork products in portions less than the entire carcase come under Foreign Meat Class 1, unless accompanied by an "Official Certificate" as evidence that the pig from which the meat is derived was absolutely free from disease at time of slaughter. If the glands are left in situ, in the case of uncertified pickled pork products, the meat may be imported under the Foreign Meat Amending Regulations, 1909.

According to the above Regulations, Denmark, Netherlands, and some other countries issued "Official" certificates of soundness, but the United States of America refused to grant this special certification. As a consequence, after the publication of the certificates in the London Gazette, all pork products from United States of America were stopped by Customs Officers for the examination of the Medical Officer and steps were taken under the Regulations to have these exported.

Representations were, however, made by the Liverpool Provision Trade Association to the Port Sanitary Authority and the Local Government Board, that the Regulations were never intended to include such products as pickled pork tongues, kidneys, mess pork, &c. In the face of these statements, and with the consent of the Local Government Board, the Medical Officer allowed the pork to go into bond and to be held to the order of the Liverpool Port Sanitary Authority, pending the result of the communication which had been addressed to the Local Government Board by the President of the Liverpool Provision Trade Association.

This procedure is provided for in the Foreign Meat Regulations, and the arrangement made was the most judicious and convenient under the circumstances, and in face of the large amounts and value of the products and the interests involved all over the country. Those interested obtained an opportunity to lay their case before the Local Government Board, who are the Arbitrators in these matters. The result fully justified the course taken. The Regulation has now been amended by the Foreign Meat Amending Order, 1909, and under this Order uncertified pickled pork products may be admitted if the lymphatic glands are present in situ.

Carcases of pigs, unless in the form of bacon or ham, may not be admitted unless the entire carcase is imported, carcasses without the head or lymphatic glands or with parts similarly removed are not allowed to

be landed. In view of this Regulation the United States Board of Animal Industry issued the following instructions to their inspectors who supervise the exportation of pork—"the lymphatic glands shall be incised, but care should be exercised in making the incision in order that the glands may not be unduly mutilated or removed from their attachment." Owing to the difficulty in examining glands of the throat in frozen pigs, the suggestion to have the parts of the throat kept open by means of skewers was also adopted.

Certificates of release are issued in triplicate by the Medical Officer of Health to the Customs Officers and importers after the consignments have been examined by the food inspectors; 1,431 certificates, representing consignments detained by Customs Officers, were issued during the year.

The examination of pickled products for the presence of preservatives prohibited under the Regulations has been carried out. The Analyst examined 56 samples of pickle and failed to find any prohibited preservatives, such as boric acid, formaldehyde, &c.

Notices to export goods were issued in 19 cases, these were chiefly for technical objections in connection with Official Certificates or for other breaches of the Regulations.

Foreign Meat of unsound character has been imported on several occasions into Liverpool, chiefly from Continental ports. This meat is chiefly salted or pickled, it is usually boneless and has been removed from the carcase in large pieces. The meat was imported in barrels or tierces, and the pieces are so rolled and packed together and tied so as to form convenient compact bundles.

These consignments have always been detained by Customs Officers for examination by the food inspectors.

On examination this meat has frequently been found to be diseased, dropsical or putrid. Evidences of tuberculosis have frequently been found or the disease concealed by the removal of glands and the stripping of pleura or peritoneum. The meat in some of the consignments was stamped—(Denmark, 2nd class, State control, 54). No stamp was visible on other pieces in other consignments or the lettering could not be made out.

It is very evident, therefore, that meat of a very objectionable character is landed from time to time in this country.

A Magistrate's Order was obtained in every case for the destruction of such meat, and in two cases legal proceedings were taken with unsuccessful results.

Several consignments of unsound meat were landed in Liverpool from Ireland, the meat was condemned under a Magistrate's Order and proceedings taken in the Police Court.

A consignment of pigs' heads arrived per s.s. "Whimbrel," from Antwerp; these were of Danish origin, and on examination were found to have no Official Certificate. A further and detailed examination under the Unsound Food Regulations revealed the fact that $112\frac{1}{2}$ heads out of a total of 720 were tubercular; these were condemned under a Magistrate's Order and destroyed. The matter was reported to the Local Government Board and enquiries were instituted.

The examination of general foodstuffs landed from vessels has been conducted with energy and to the entire satisfaction of all concerned.

Large quantities of these goods have been condemned during the year, but the largest and worst consignments have proved to be those damaged through some accident to the ship, e.g., collision and subsequent submersion, or in the case of fruit the goods proved to be over-ripe or in a rotten condition.

Large quantities of salvage cargoes are frequently landed coastwise and in this connection it may be mentioned that 9,600 tins of condensed milk damaged in this way were allowed to go for cattle and poultry food; the usual guarantees having been given to the Medical Officer of Health.

The s.s. "Segontian," which was in collision and sank in the river, had on board a large quantity of food stuffs and the following were condemned and destroyed after sorting and when suitable arrangements had been made with the Salvage Company regarding destruction, viz. :— 7,238 tins tomatoes, 1,454 cases onions, 100 tons raisins, 3 tons macaroni, 8 cases pimento, 30 cases melons, and other small quantities.

Importations of Diseased Meat from the Continent during 1909.

TABLE 10.

Date.	Steamer.	Description.	Remarks.
1909			
29 Jan.	Greenland from Hamburg	2 tierces Salted Beef, weight 827 lbs.	Tubercular, pleura and peritoneum stripped. Magistrate's Order obtained.
18 Feb.	Zealand from Hamburg	7 barrels Salted Beef, weight 1,171 lbs.	Tubercular glands removed, pleura and peritoneum stripped. Labels indicated as place of origin : Andels—Sirneslagteriet 1 Kold- ing, 2 Klasse Kod. Lead tags marked :— K.K. Denmark.
18 Feb.	Zealand from Hamburg	2 barrels Salted Pork, weight 506 lbs.	Tubercular and rancid. Danish stamp.
18 Feb.	Zealand from Hamburg	1 barrel Salted Beef, weight 253 lbs.	Decomposing and of poor quality ; glands and bones removed. No stamps visible.
11 Mar.	Greenland from Hamburg	16 barrels Salted Beef, weight 3,520 lbs.	Tubercular ; serous membrane stripped and bones removed ; extensively emaciated. Information laid under P.H.A. 1875. Case dismissed.
13 Mar.	Dotterel from Rotterdam	5 barrels Salted Beef, weigh 1,000 lbs.	Decomposing.
19 Mar.	Rhineland from Hamburg	7 barrels Salted Beef, weight 1,540 lbs.	Tubercular ; serous membrane stripped and bones and glands removed ; extensively emaciated.
22 April	Iceland from Hamburg	2 barrels Salted Beef, weight 400 lbs.	Tubercular.
7 May...	Fulmar..... from Dunkirk	1 barrel Salted Beef, weight 300 lbs.	Decomposing.
23 Dec.	Zealand from Hamburg	2 barrels Salted Beef, weight 800 lbs.	Tubercular and dropsical.

The sampling and examination of articles of food under the Regulations, by the Chemical Analyst and by the Bacteriologist for evidences of substances prejudicial to health, was carried out carefully during the year. 82 samples were submitted to the Analyst, and 13 samples to the Bacteriologist.

Samples were submitted for the presence of copper in preserved peas, beans, capers, &c.; they were found in small quantities in the substances examined, but the quantities present were not excessive and did not exceed the limit laid down by the Departmental Committee on Food Preservatives. Various consignments of canned tomatoes, fruits, pine apples, &c., were examined for the presence of tin and lead. These metals were found in tinned tomatoes in small quantities, approximately $\frac{1}{30}$ grain per pound in the case of tin, lead being absent in most cases. The analysis of tinned pine apples for zinc, tin and lead was undertaken at the instance of the Local Government Board, and proved of great interest; samples were taken from consignments arriving in this port from the East; some were taken on discharge from the ship, and others from similar consignments which had gone to Importers in this City; the analysis of the series will prove of interest to other Public Health Authorities. (See table.)

The consignments which came from Singapore and neighbourhood bore a variety of labels which were put on after importation. The tin plate appeared to be of an inferior kind, and the soldering had been done in a careless manner.

The importers acted in co-operation with the Medical Officer of Health, in order to ascertain the condition as regards metallic contamination of their stocks of pines, and fresh consignments landed from vessels were sampled from time to time.

In addition, consignments of salmon, tinned meats, shrimps, egg pulp, dried and other milk, anchovies, butter, &c., were examined.

The Local Government Board issued a memorandum on the action desirable in connection with tins of condensed milk and other products which have been "spitted" by Customs Officers and are no longer required for Customs purposes. Customs Officers in their examination for revenue purposes frequently puncture or "spit" tins of condensed milk and other goods, these, if satisfactory, are released, and it has been the practise to re-seal these and replace in the case.

Report on Analysis of Tinned Pine Apple.

SAMPLES TAKEN ON ARRIVAL IN THE PORT OF LIVERPOOL.

Date received.	No. of Sample.	Articles.	Weight in lbs.	Ship.	Zinc. (Grains)	Tin. per pound	Lead.
1909 Aug. 17	62 SRCo H	Pine Apple	1½	Antenor Singapore	—	0·66	Absent
„	63 T.B.	„	2½	Do.	—	0·40	„
„	64 TTC&Co	„	3	Dardanus Singapore	—	0·70	„
„	65 J.S.	„	1½	Do.	—	1·50	„
Aug. 25	67	„	1½	Pellerophon Saigon	Minute traces of Zinc varying from 1/10 to 1/30 grain per pound	0·52	„
„	68	„	1	Do.		0·77	„
„	69	„	3	Do.		0·33	„
„	70	„	2½	Do.		0·55	„
„	71	„	1	Do.		0·48	„
„	72	„	1	Do.		0·88	„
„	73	„	2	Do.		0·60	„
„	74	„	1	Do.		0·81	„

SAMPLES TAKEN IN THE CITY OF LIVERPOOL.

Date received.	No. of Sample.	Article.	Zinc. (Grains)	Tin. per pound	Lead.
1909 August 14	C. 1630	Pine Apple Cubes	All samples contained traces of Zinc varying from 1/10 to 1/30 grain.	0·41	Absent.
„	1631	„ Chunks		0·60	„
„	1632	„ „		0·16	„
„	1633	„ Cubes		0·29	„
„	1634	„ „		0·18	„
„	1635	„ „		0·38	„
„	1636	„ „		1·16	„
„	1637	„ Chunks		0·93	„
„	1638	„ „		1·00	„
„	1639	„ „		0·71	„
„	1640	„ „		0·75	„
„	1641	„ „		0·38	„
August 19	C. 1642	Pine Apple	All samples contained traces of Zinc varying from 1/7 to 1/30 grain.	1·24	0·007
„	1643	„		0·44	Absent.
„	1644	„		0·21	„
„	1645	„		0·37	„
„	1646	„		0·13	0·02
„	1647	„		0·80	Absent.
„	1648	„		0·41	„
„	1649	„		0·77	„
„	1650	„		1·09	„
„	1651	„		1·40	„
„	1652	„		0·63	„
„	1653	„		0·55	0·007

The contents of resealed tins, owing to exposure to air are liable to putrefaction and subsequently become blown.

These tins, especially if small, are in the majority of cases handed to the Officer of the Port Sanitary Authority for destruction.

Some difficulty, however, arose at certain ports in the case of larger tins, e.g., 14-28 lbs., which have some money value, and the Condensed Milk Clearing House and Defence Association have recently advised their members to agree to the following arrangements:—

“ The Association on considering the question of the disposal of
“ condensed milk ‘spitted’ by the Customs. recommends importers
“ to co-operate with Medical Officers of Health at the Port of Entry
“ with a view to arrangements on the following lines:—

“ 1. SMALL TINS.—Unless the importer has made other arrange-
“ ments approved by the Medical Officer of Health, the latter to
“ receive the tins to be disposed of by him either by destruction or
“ where practicable by handing them to a charitable institution
“ with directions for immediate use. A voucher to be placed inside
“ the case stating that a ‘spitted’ tin has been removed, and the
“ case marked outside to show that it is incomplete.

“ 2. LARGE TINS.—Unless the importer has made arrangements
“ with the Medical Officer of Health for these tins to be handed
“ over for destruction, the tins to be re-soldered as soon as
“ practicable, labelled—‘this tin has been opened for examination
“ by the Customs, and having been opened should be used
“ immediately’ and sent forward in a case bearing a distinctive
“ mark. Special arrangements to be made by the importers in all
“ such cases to see that the tin is used in the way agreed upon.’

Certain products such as fats, stearine, &c., derived from diseased and unsound animals (chiefly pigs) and therefore unfit for food, are required by the United States Department of Agriculture under the Regulations governing meat inspection, and before being used in interstate or foreign commerce, to be denatured so as to prevent them being used for food purposes.

It was, however, pointed out to the United States Authorities, that the denaturing process would prevent the product being used for certain industrial purposes; after consideration the United States Government

amended the Regulation and stipulated that the ends of the containers of these products should be painted white and conspicuously stencilled with the name of the product and the word "inedible."

Many of these "inedible" fats, under the name of stearine, hog fat, gut fat, bone grease, &c., possess appearances which closely approximate both in colour, taste, consistency and smell to genuine refined lard, and when one considers that they can be bought in the United States at anything from 30s. to 40s. per cwt., whilst the price of genuine lard stearine is 60s. and upwards, it will be evident that a very profitable business may be conducted when these products are incorporated in food stuffs.

Representations were made to the Local Government Board by persons concerned in the genuine lard business in this country that inedible products were being used to mix with genuine lard, and that the adulteration was affecting injuriously the pure lard industry in this country.

When the Unsound Food Regulations came into operation in January of this year, the duty of following up all consignments of these products to their ultimate destination was imposed upon the Port Authorities. Further, the Local Government Board requested the Port Sanitary Authority to bring some pressure to bear on importers to ascertain how these products were disposed of. It soon became evident, owing to the number of brokers and others handling these goods, that they must be detained under the Regulations and a guarantee given by each importer that they would not be used for or incorporated in human food.

Many agreed to this procedure and the goods were allowed to go for soap making, lard oil refining, &c., after the usual assurances; attempts, therefore, to pass them on to persons who would use them for food purposes was, to some extent, frustrated.

Others, chiefly brokers, were not willing to bind themselves to this, and desired to export the consignments to the Continent and elsewhere, and the Liverpool inspectors have had to see that the products left the country.

In this way many consignments have been shipped to Hamburg, Antwerp, Naples, St. Petersburg and Riga; whether these returned in another form or with the word "inedible" removed, is a matter about which the Authority has not been able to satisfy itself, but it has been absolutely proved that certain of these did return, after having been re-marked and sold as South American lard.

Some idea of the amount of these products imported into Liverpool will be gained when it is stated that during the past ten months over 6,500 barrels and packages were detained by the Port Officers until satisfactory assurances were forthcoming.

The Liverpool General Brokers' Association was approached with the object of getting their assistance in the matter, and the Medical Officer of Health addressed the following letter to the Secretary:—

Dear Sir,

Material Imported from the United States and marked
“Inedible.”

I have received information that consignments of inedible fats consigned to certain firms in Liverpool have found their way to places where human food is prepared and have been made up into lard or margarine.

It would greatly facilitate the repression of an illegal trade in this material if you would be kind enough to call the attention of the members of your Association to the circumstances, as I am sure that they fully wish to co-operate in every way in preventing the sale of inedible material for human food.

I am,

Yours faithfully,

(Signed) E. W. HOPE,

Medical Officer of Health.

The Committee of the Association decided that the members of the Association should be notified in the following terms:—

Dear Sir,

I am instructed by the Committee of this Association to draw your careful attention to the annexed copy of letter received from Dr. E. W. Hope, Medical Officer of Health for Liverpool, with regard to material imported from the United States and marked “inedible,” and to impress upon the members the great desirability of using every legitimate endeavour to put a stop to this illegal trade.

Yours respectfully,

H. O. COOPER,

Secretary.

The following tables representing the amounts of condemned meat, offal and other food imports which have been destroyed or otherwise dealt with to the satisfaction of the Medical Officer of Health are interesting and instructing. They testify to the usefulness of this work of supervision of our imported food supply.

TABLE SHOWING THE QUANTITIES OF FOOD STUFFS
(OTHER THAN FROZEN, CHILLED AND PICKLED MEATS)
CONDEMNED DURING THE YEAR 1909.

TABLE 11.

Canned or Bottled Goods—		Fruit (Dried)—	
Apricots	3,820 tins.	Raisins	100 $\frac{1}{4}$ tons.
Apricot Pulp	1,445 „		
Pine Apples	288 „	Vegetables—	
Pears	2,795 „	Potatoes	4 $\frac{3}{4}$ tons.
Peaches	318 „	Onions	1,684 boxes.
Tomatoes	10,043 „		
Salmon	965 „	Cereals	91 $\frac{1}{4}$ tons.
Fruit (Fresh)—			
Plums.....	170 packages.	Spices	8 cases.
Melons	495 „		
Tomatoes	125 „	General—	
Apples.....	29 „	Beef	37 tins,
Pears	7 „	Boiled Mutton	2,288 „
Bananas.....	2,915 „	Sausages	384 „
Oranges	3,757 „	Condensed Milk	9,600 „
Cocoa Nuts	10 „	Milk	30 bottles.
Lemons	80 „	Stout.....	14,124 „
Pine Apples	3,030		

TABLE SHOWING THE QUANTITY AND DESCRIPTION
OF OFFAL CONDEMNED DURING THE YEAR 1909

TABLE 12.

OFFAL.				
Name of Organ.	Beef.	Mutton.	Pork.	Veal.
Livers	2,828	404	1,084	1
Kidneys	6,535	1	—	—
Plucks	—	9,985	51	1
Tripe	1,200	—	—	—
Lungs	—	367	3	8
Hearts	36	1	1	—
Tongues	2	—	—	—
Tails	1	—	—	—
Throats	1	—	—	—
Cheeks	64	—	—	—
Heads	—	—	113½	—
Total... ..	10,667	10,758	1,252½	10

The organs dealt with above were rejected for various reasons, notably diseased conditions, such as Cysts, Tuberculosis, Inflammation, &c.

TABLE SHOWING THE QUANTITY AND DESCRIPTION OF MEATS CONDEMNED
DURING THE YEAR 1909.

TABLE 13.

DESCRIPTION.	CAUSE OF DESTRUCTION.																			
	Tubercular.			Mouldy and Decomposed.			Decomposed.			* Other causes.										
	Tons	cwts.	qrs.	lbs.	Tons	cwts.	qrs.	lbs.	Tons	cwts.	qrs.	lbs.	Tons	cwts.	qrs.	lbs.				
Beef	60	11	0	14	3	19	0	10	38	11	0	13	5	2	2	2	12	18	1	17
Mutton.....	27	17	0	9					16	14	3	25	5	1	1	4	6	0	3	8
Pork	1	12	0	15	0	6	0	26					1	3	3	4	0	2	0	13
Total.....	90	0	1	10	4	5	1	8	55	6	0	10	11	7	2	10	19	1	1	10

* Emaciation, Dropsy, Pleurisy, etc.

TABLE 14.

Shewing comparative Value of the more important Food Stuffs imported at the principal Ports during 1908. *

	London. 1	Liverpool. 2	Hull. 3	Harwich. 4	Leith. 5	Bristol. 6	Glasgow. 7	South- ampton. 8	Manchester 9	Newcastle. 10
	£	£	£	£	£	£	£	£	£	£
Animals—living	2,684,233	3,059,609	—	—	—	2,412	441,564	23,035	460,867	—
Butter	6,611,257	196,587	3,428,559	1,646,246	2,558,014	207,296	—	2,426,184	163	2,462,346
Cheese	3,430,004	1,264,581	102,908	104,352	218,886	889,748	188,761	142,055	139,816	26,572
Cocoa	1,137,993	431,345	—	218,464	—	222,936	—	751,502	—	—
Coffee	1,357,431	15,892	—	—	—	—	—	587,031	—	—
Grain	16,911,001	15,268,485	8,730,537	60,899	2,897,977	4,304,275	4,251,771	423,611	2,963,167	1,412,595
Eggs	2,091,163	113,034	1,156,032	1,156,318	1,101,526	14,339	14,913	180,452	26,096	383,453
Fish	911,718	1,012,993	592,256	96,722	51,116	—	—	49,385	—	128,932
Fruit	5,235,432	4,126,317	631,842	44,478	57,801	707,833	650,855	616,822	902,541	190,027
Lard	1,019,037	1,712,572	473,501	—	15,943	285,904	202,008	66,918	795,035	5,036
Margarine	235,021	324,124	469,463	671,253	114,965	—	33,369	—	—	40,785
MEAT :—										
Bacon	1,034,810	5,735,091	823,132	4,379,362	—	424,116	528,895	613,110	152,460	279,905
Beef, Fresh	2,834,420	4,184,195	193,577	16,034	—	—	195,558	2,605,204	—	134,593
” Salted	—	102,344	—	—	—	—	—	—	—	—
Hams	378,781	2,200,446	16,754	—	—	25,085	359,859	3,277	96,544	—
Mutton Fresh.....	5,394,783	1,912,016	82,657	427,383	—	52,652	—	—	—	81,077
Pork Fresh	856,822	272,733	—	222,189	—	—	—	7,201	—	—
” Salted	—	106,744	—	—	88,542	—	—	—	—	—
Rabbits	413,999	222,321	—	20,854	—	—	—	—	—	24,392
Unenumerated	517,927	359,484	—	216,622	8,122	—	—	—	—	—
Preserved, not Salted	926,792	362,888	46,633	—	—	77,649	111,928	116,767	116,787	—
Milk, Condensed	752,393	119,395	110,543	102,734	37,912	47,831	—	—	104,977	138,057
Poultry and Game	528,711	128,965	62,764	104,397	—	—	—	38,807	—	—
Sugar	6,737,912	3,513,145	864,278	107,342	1,333,296	1,108,881	84,241	140,575	852,453	152,379
Vegetables	947,821	662,169	330,511	49,350	37,144	47,269	58,198	732,729	108,228	75,093

* The return for 1909 is not yet published.

EMIGRATION.

There is an increase in the number of emigrants leaving the Port during the past year the total being 41,245 in excess of the year 1908.

The following is a return of the number of emigrants and clearances of ships, including those passenger vessels in which medical inspection was not required, from 1899-1909 :—

TABLE 15.

In 1899, 118,568 Emigrants, and 714 Clearances of Ships.

„ 1900, 149,884	„	660	„
„ 1901, 167,452	„	761	„
„ 1902, 214,113	„	791	„
„ 1903, 265,918	„	902	„
„ 1904, 274,584	„	924	„
„ 1905, 277,536	„	983	„
„ 1906, 352,818	„	1,090	„
„ 1907, 385,797	„	1,102	„
„ 1908, 212,155	„	1,113	„
„ 1909, 253,400	„	1,117	„

The following Tables, Nos. 16 and 17, relating to Emigration, have been kindly supplied by the Board of Trade.

TABLE 16.

Statement showing the Number of Passengers of each Nationality that left the Port of Liverpool for places out of Europe in the year 1909 :—

DESTINATION.	NATIONALITY OF PASSENGERS.						
	English.	Welsh.	Scotch.	Irish.	British Colonial.	Foreign.	Total.
British North America.	56,933	1,189	3,450	1,343	3,094	26,087	92,096
Australia and New Zealand	5,632	61	1,224	409	164	55	7,545
British South Africa ...	551	2	39	6	28	25	651
India (including Ceylon)	2,626	41	705	136	252	106	3,866
Other British Colonies and Possessions	2,258	36	376	134	142	133	3,079
Total British Empire...	68,000	1,329	5,794	2,028	3,680	26,406	107,237
United States.....	37,425	1,425	2,006	3,821	463	93,866	139,006
Other Foreign Countries	4,575	197	908	288	29	1,160	7,157
Total Foreign Countries	42,000	1,622	2,914	4,109	492	95,026	146,163
Grand Total.....	110,000	2,951	8,708	6,137	4,172	121,432	253,400

TABLE 17.

Number of Passengers of each Nationality, as given in Table No. 16, that sailed from the Port of Liverpool in each month of the year 1909.

MONTH.	NATIONALITY OF PASSENGERS.						
	English.	Welsh.	Scotch.	Irish.	British Colonial.	Foreign.	Total.
January	4,666	85	464	235	90	4,709	10,249
February	5,591	106	486	241	126	6,372	12,922
March.....	10,044	195	677	369	209	11,120	22,614
April	12,930	231	744	642	157	12,297	27,001
May	11,416	300	748	517	205	11,279	24,465
June	9,545	301	1,006	478	345	9,869	21,544
July	11,395	418	952	541	685	10,714	24,705
August.....	10,444	342	751	705	923	12,890	26,055
September	11,679	404	904	946	865	14,874	29,672
October	11,266	333	964	837	286	11,007	24,693
November	6,814	164	612	419	158	9,658	17,825
December	4,210	72	400	207	123	6,643	11,655
Total	110,000	2,951	8,708	6,137	4,172	121,432	253,400

Emigrant Inspections.

All emigrants travelling second class or steerage on board vessels outward bound are subject to inspection by the Medical Officers of the Board of Trade, Dr. Burland and Dr. Macintyre. The crews of all such vessels bound for America are also subjected to inspection by these Officers. An Inspector of the Port Sanitary Authority attends these clearances in order to supervise the removal of all persons who may be rejected on account of actual or suspected infectious disease.

There were 341 such inspections, and 60 persons were rejected on account of infectious disease, most of whom were removed to the various City Hospitals.

In addition to the persons rejected by the Board of Trade Sanitary Inspectors, large numbers of persons are rejected on account of Trachoma by the ships surgeons. Persons suffering from Trachoma, which is a transmissible form of Ophthalmia, are not permitted to land in the United States.

TABLE 18.

PARTICULARS OF REJECTIONS OF EMIGRANTS. (Board of Trade Inspections.)

Date, 1909.	Name of Vessel.	Nature of Sickness.	Where taken to.	Description of Patient.
Jan. 1	Celtic ...	Sycosis ...	Returned ashore ...	Adult
,, 12	Saxonia ...	Trachoma ...	Returned ashore ...	Adult
,, 13	Baltic ...	Diphtheria ...	City Hospital, Mill Lane..	Child
,, 21	Haverford ...	Favus ...	Returned ashore ...	Adult
,, 21	,, ...	Trachoma ...	Returned ashore ...	Adult
Feb. 12	Empress of Britain	Chicken-pox ...	Returned home ...	Children (2)
March 9	Saxonia ...	Erysipelas ...	Boarding House, 5, Great George Square	Adult
,, 12	Merion ...	Chicken-pox ...	Returned home ...	Child

TABLE 18.—*Continued.*

Date, 1909.	Name of Vessel.	Nature of Sickness.	Where taken to.	Description of Patient.
March 12	Merion ...	Chicken-pox ...	City Hospital, Fazakerley.	Adult
,, 18	Canada ...	Observation ...	Returned home ...	Adult
,, 27	Lucania ...	Measles ...	City Hospital ... Grafton Street	Child
,, 27	Essex ...	Lupus ...	Returned ashore ...	Adult
,, 31	Haverford ...	Observation ...	Boarding House ... 11, Great George Square	Adults (2)
,, 31	Lake Manitoba	Chicken-pox ...	City Hospital, Fazakerley.	Children (2)
April 16	Arabic ...	Itch ...	Returned ashore ...	Infant
,, 22	Canada ...	Chicken-pox ...	City Hospital, Fazakerley.	Infant
,, 23	Empress of Ireland	Whooping Cough..	Returned ashore ...	Child
,, 30	Virginian ...	Chicken-pox ...	City Hospital, Fazakerley.	Infant
May 11	Carmania ...	Mumps ...	Returned to London ...	Child
,, 15	Mauretania ..	Scabies ...	Boarding House, 5, Great George Square	Child
, 18	Ivernia ...	Tonsilitis ...	Returned ashore ...	Child
June 8	Carmania ...	Chicken-pox ...	Returned home ...	Child
,, 8	,, ...	Measles ...	City Hospital, Parkhill ...	Infant
July 8	Laurentic ...	Observation ...	Boarding House ... 122, Duke Street	Infant
,, 10	Arabic ...	Observation ...	Boarding House ... 122, Duke Street	Adult
,, 29	Tunisian ...	Consumption ...	Returned home ...	Adult
Aug. 11	Cymric ...	Lunacy ...	Returned ashore ...	Adult

TABLE 18.—*Continued.*

Date, 1908.	Name of Vessel.	Nature of Sickness.	Where taken to.	Description of Patient
„ 13	Empress of Ireland	Chicken-pox ...	City Hospital, Fazakerley.	Infant
„ 26	Persic ...	Consumption ...	Returned home ...	Adult
„ 27	Empress of Britain	Chicken-pox ...	Returned to London ...	Infant
„ 28	Lusitania ...	Observation ...	Boarding House, 5, Great George Square	1 Adult, 6 Children
Sep. 1	Merion ...	Chicken-pox ... Convalescent	Boarding House ... 17, Upper Newington	Infant
„ 10	Empress of Ireland	Itch ...	Boarding House ... Paradise Street	Infant
„ 17	Virginian ...	Scarlet Fever ...	City Hospital ... Grafton Street	Infant
„ 23	Dominion ...	Observation ...	Boarding House ... 11, Great George Square	Child
„ 24	Empress of Britain	Consumption ...	Returned to Merthyr ... Tydvil	Adult
Oct. 2	Campania ...	Tinea Cicinata ...	Returned to Manchester...	Adult
„ 16	Cedric ...	Scabies ...	Boarding House ... 130, Duke Street	Children (2)
„ 22	Empress of Britain	Chicken-pox ...	Returned home	Child
„ 23	Mauretania	Measles ...	City Hospital ... Grafton Street	Children (2) Infant
„ 30	Arabic ...	Chicken-pox ...	Returned home ...	Child
Nov. 6	Celtic ...	Consumption ...	Returned to Stoke ...	Adult
„ 10	Merion ...	Itch ...	Boarding House ... 11, Great George Square	Adults (2)
„ 20	Baltic ...	Itch ...	Boarding House ... 130, Duke Street	Adult
„ 20	„ ...	Verminous ...	Boarding House ... 130, Duke Street	Adult
Dec. 31	Empress of Britain	Trachoma ...	Returned ashore ...	Adults (2)

As in previous years, the various bodies connected with the administration of the Port, viz., H.M. Collector of Customs and staff, the Mersey Docks and Harbour Board and their officers, and the various Shipping Companies, have co-operated with the Port Sanitary Authority in preventing disease, and have worked harmoniously together in every particular. The Consular Body have at all times given courteous assistance.

E. W. HOPE, M.D.

MUNICIPAL OFFICES,

LIVERPOOL, *13th April*, 1910.

APPENDIX.

REGULATIONS AS TO CHOLERA, YELLOW FEVER, AND PLAGUE:
SHIPS ARRIVING FROM FOREIGN PORTS.

PORTS OF LIVERPOOL AND
MANCHESTER.

LIVERPOOL }
AND } PORT SANITARY AUTHORITIES.
MANCHESTER }



To the Manchester Port Sanitary Authority;—

To the Liverpool Port Sanitary Authority;—

To the Officers of Customs of the Ports of Manchester and Liverpool.
To the Medical Officers of Health of the said Port Sanitary Authorities.
To all Masters of Ships.
To all Pilots.
And to all others whom it may concern.

WHEREAS We, the Local Government Board, are empowered by Section 130 of the Public Health Act, 1875, as amended by the Public Health Act, 1896, from time to time to make, alter, and revoke such Regulations as to Us may seem fit, with a view to the treatment of persons affected with Cholera or any other epidemic, endemic, or infectious disease, and preventing the spread of Cholera and such other diseases, as well on the seas, rivers, and waters of the United Kingdom, and on the high seas within three miles of the coasts thereof, as on land; and to provide for the enforcement and execution of such Regulations;

And whereas by Section 1 of the Public Health Act, 1896, it is enacted that Regulations of the Local Government Board made in pursuance of Section 130 of the Public Health Act, 1875, or in pursuance of that Section, as extended to London by the Public Health (London) Act, 1891, may provide for such Regulations being enforced and executed by the Officers of Customs and the Officers and men employed in the Coastguard as well as by other authorities and officers, and without prejudice to the generality of the powers conferred by those Sections may provide for—

- (a) the signals to be hoisted by vessels having any case of epidemic, endemic, or infectious disease on board; and
- (b) the questions to be answered by masters, pilots, and other persons on board any vessel as to cases of such disease on board during the voyage or on the arrival of the vessel; and
- (c) the detention of vessels and of persons on board vessels; and
- (d) the duties to be performed in cases of such disease by masters, pilots, and other persons on board vessels: Provided that the regulations shall be subject to the consent—
 - (a) so far as they apply to the Officers of Customs, of the Commissioners of His Majesty's Customs; and

(b) so far as they apply to officers or men employed in the Coastguard, of the Admiralty ; and

(c) so far as they apply to signals, of the Board of Trade.

And whereas by sub-section (1) of Section 1 of the Public Health Act, 1904, it is enacted as follows :—

“ 1.—(1) The power of making regulations under the Public Health Act, 1896, and the enactments mentioned in that Act, shall include the power of making regulations authorising measures to be taken for the prevention of danger arising to public health from vessels arriving at any port, and for the prevention of the conveyance of infection by means of any vessel sailing from any port, so far as may be necessary or expedient for the purpose of carrying out any treaty, convention, arrangement, or engagement with any foreign country, and the regulations may in particular provide for the recovery of any expenses incurred in disinfection and of any charges authorised to be made by the regulations for the purpose of those regulations or any services performed thereunder, and also for any powers and duties under the regulations being executed and performed by local authorities :

“ Provided that the regulations shall not be made except after consultation with the Board of Trade.”

And whereas by an Order dated the 30th day of August, 1897 (hereinafter referred to as “ the Order of 1897 ”), We made Regulations with regard to the Port of Manchester and ships bound to that Port and coming or being within the Port of Liverpool, with a view to the treatment of persons affected with Cholera, Yellow Fever, or Plague, and for preventing the spread of any of those diseases, and with respect to the signals to be hoisted by ships infected with Cholera, Yellow Fever, or Plague ;

And whereas by a General Order dated the 9th day of September, 1907, We made Regulations with regard to the treatment of persons affected with Cholera, Yellow Fever, or Plague, and for preventing the spread of any of those diseases, and with respect to the signals to be hoisted by ships infected with Cholera, Yellow Fever, or Plague, and declared that those Regulations should apply and have effect throughout England and Wales, except as regards the Port Sanitary Districts of Bristol and Gloucester, Harwich and Ipswich, and Liverpool and Manchester ;

And whereas it is expedient that the Order of 1897 should be revoked, and that other Regulations should be made as hereinafter mentioned ;

And whereas the Commissioners of His Majesty's Customs and the Board of Trade have respectively signified their consent to the Regulations hereinafter set forth, so far as they respectively apply to the Officers of Customs and to signals, and the said Regulations, so far as they apply to any matter in respect of which We are empowered by the Public Health Act, 1904, to make Regulations, have been made after consultation with the Board of Trade :

NOW THEREFORE, We, the Local Government Board, do hereby revoke the Order of 1897, except in so far as it may apply to any proceedings now pending, and We do, by this Our Order, and in the exercise of the powers conferred on Us by the Public Health Act, 1875, the Public Health Act, 1896, and the Public Health Act, 1904, and every other power enabling Us in that behalf, make the following Regulations with regard to the said Ports of Liverpool and Manchester, and ships arriving from a foreign port and bound to the Port of Liverpool, or to the Port of Manchester, and coming or being within the Port of Liverpool, and Declare that the said Regulations shall apply and have effect as regards the Port Sanitary Districts of Liverpool and Manchester, and shall be enforced and executed by the Authorities and Officers hereinafter mentioned :—

PART I.

ARTICLE I.—In this Order—

The expression “ Ship ” includes a vessel or boat ;

The expression “ Foreign Port ” means a port or place situate elsewhere than in the United Kingdom, the Channel Islands, and the Isle of Man ;

The expression "Officer of Customs" includes any person acting under the authority of the Commissioners of His Majesty's Customs ;

The expression "Master," used in relation to a ship, includes the officer, pilot, or other person for the time being in charge or command of the ship ;

The expression "Local Authority" means a Council of a Municipal Borough or other Urban District or a Rural District Council, and in the Administrative County of London a Council of a Metropolitan Borough, or the Common Council of the City of London ;

The expression "Medical Officer of Health" includes any duly qualified Medical Practitioner appointed or employed to act in the execution of this Order ;

The expression "Infected Ship" means a ship which at the time of its arrival from a foreign port has on board a case of Cholera, Yellow Fever, or Plague, or which has had on board a case of Cholera or Plague within a period of seven days, or of Yellow Fever within a period of eighteen days, prior to that time ;

The expression "Suspected Ship" means a ship which has had on board during the voyage or during the stay of the ship in the port of departure or in a port in the course of the voyage a case of Cholera, Yellow Fever, or Plague, but which has not had on board a fresh case of Cholera or Plague within a period of seven days, or of Yellow Fever within a period of eighteen days, prior to the time of its arrival from a foreign port.

PART II.

ARTICLE II.—In the case of a ship arriving from a foreign port and bound to the Port of Liverpool and coming or being within the jurisdiction of the Liverpool Port Sanitary Authority, the Regulations prescribed by the said General Order dated the Ninth day of September, One thousand nine hundred and seven, shall apply and have effect and shall be enforced and executed by the Authorities and Officers therein referred to.

PART III.

ARTICLE III.—In the case of a ship arriving from a foreign port and bound to the Port of Manchester which is brought up for Customs purposes within the Port of Liverpool the following provisions shall have effect :—

- (1.) The Officer of Customs who visits a ship on its arrival from a foreign port shall ascertain, so far as possible, whether the ship is an infected ship or a suspected ship, or whether the ship has come from or has, during the voyage, called at a port infected with Cholera, Yellow Fever, or Plague, and with that object, shall require the Master of the ship or the Surgeon, if the ship carries a Surgeon, to state whether there is or has been on board during the voyage any case or suspected case of Cholera, Yellow Fever, or Plague, or of any other fever or sickness, and if he have any reason to suppose that the ship is an infected ship or a suspected ship or has come from or has, during the voyage, called at any port infected with Cholera, Yellow Fever, or Plague the Officer of Customs shall require the Master or the Surgeon, as the case may be, to give (in writing under his hand and in the form hereunto appended or in a form to the like effect) a true answer to the following question :—

Question.—Has any case or suspected case of
Cholera,
Yellow Fever, or
Plague

occurred in the ship _____, of which you are

_____, during the voyage from

_____, or during the stay of the ship in that port or in

any other port in the course of the voyage ?

Answer.— cases or suspected cases of
 occurred on board the during the
 voyage from [or during the stay of the
 ship in the port of [;

or

No case or suspected case of Cholera, Yellow Fever, or Plague
 occurred on board the
 during the voyage from , or during
 the stay of the ship in that port or in any other port in the course of
 the voyage.

.....,

Master [or Surgeon] of the

.....

- (2.) The Officer of Customs who visits a ship on its arrival from a foreign port shall, if he find, or have reason to suppose, that the ship is an infected ship or a suspected ship, and may, if he find or have reason to suppose that the ship has come from, or has, during the voyage, called at a port infected with Cholera, Yellow Fever, or Plague, detain the ship, and order the Master forthwith to moor or anchor it in such position as the Officer of Customs directs; and thereupon the Master shall forthwith moor or anchor the ship accordingly.
- (3.) No person (other than an Officer of Customs or a person acting in the execution of this Order) shall leave a ship while it is detained by the Officer of Customs in pursuance of subdivision (2) of this Article.
- (4.) The Officer of Customs who detains, in pursuance of subdivision (2) of this Article, any ship bound to the Port of Manchester, shall forthwith give notice thereof, and of the cause of detention, to the Liverpool Port Sanitary Authority.
- (5.) The detention of a ship by the Officer of Customs in pursuance of subdivision (2) of this Article shall cease as soon as the ship has been duly visited and examined by the Medical Officer of Health of the Liverpool Port Sanitary Authority; or, if the ship, upon examination by the said Medical Officer of Health, be found to be an infected ship or a suspected ship as soon as it has been moored or anchored in pursuance of subdivision (1) of Article VIII., at the mooring station (hereinafter referred to as "the Liverpool Mooring Station") fixed by the Liverpool Port Sanitary Authority for the purposes of the Order of 1897, or of the Order by that Order revoked:

Provided that if the examination be not commenced within twelve hours after the ship has been moored or anchored in pursuance of subdivision (2) of this Article, the ship shall, on the expiration of the said twelve hours, be released from detention.

- (6.) The Liverpool Port Sanitary Authority shall make provision for the reception of patients removed under subdivisions (4) and (5) of Article VIII. as persons certified by their Medical Officer of Health to be suffering from Cholera, Yellow Fever, or Plague, or certified by the said Medical Officer of Health to be suffering from an illness which, in his opinion, may prove to be Cholera, Yellow Fever, or Plague.
- (7.) The Liverpool Port Sanitary Authority, on notice of the detention of a ship being given to them by an Officer of Customs, under subdivision (4) of this Article, shall forthwith cause the ship to be visited and examined by their Medical Officer of Health for the purpose of ascertaining whether the ship is an infected ship or a suspected ship; and shall, at the same time, inform the Manchester Port Sanitary Authority of the detention of the ship.

ARTICLE IV.—The Medical Officer of Health of the Liverpool Port Sanitary Authority as regards ships bound to the Port of Manchester and coming or being within the Port of Liverpool, or the Medical Officer of Health of the Manchester

Port Sanitary Authority as regards ships coming or being within the Port of Manchester, if he have reason to suppose that a ship, whether the ship has or has not been visited and examined by the Officer of Customs is an infected ship or a suspected ship, shall, or, if he have reason to suppose that the ship has come from, or has, during the voyage, called at a port infected with Cholera, Yellow Fever, or Plague, may, visit and examine the ship for the purpose of ascertaining whether it is an infected ship or a suspected ship; and may make the like visit and examination in the case of any such ship which has come from, or has, during the voyage, called at a port infected with Cholera, Yellow Fever or Plague. The Master of any such ship shall permit the ship to be so visited and examined.

The Master of any such ship shall also, on being required so to do by the Medical Officer of Health of the Liverpool Port Sanitary Authority or of the Manchester Port Sanitary Authority as the case may be, cause the ship to be brought to, and, if necessary, moored or anchored in some convenient place while it is visited and examined; but due regard shall be had to the safety of the ship and to the convenience of navigation.

ARTICLE V.—If the Medical Officer of Health of the Liverpool Port Sanitary Authority on making an examination of a ship under subdivision (7) of Article III. or under Article IV. be of opinion that the ship is an infected ship or a suspected ship, he shall forthwith give a certificate in duplicate in the following Form, or to the like effect, and shall deliver one copy to the Master, and retain the other copy or transmit it to the Liverpool Port Sanitary Authority. He shall also inform the Manchester Port Sanitary Authority of the case by the speediest method available and shall give to Us information as to the arrival of the ship, and such other particulars as We may require.

Certificate.

.....day of....., 19.....

.....PORT SANITARY AUTHORITY.

I hereby certify that I have examined the ship _____ of _____, now lying in the Port of _____ [or *detained at* _____], and I find that the said ship is an infected ship or a suspected ship by reason of Cholera, or Yellow Fever, or Plague

Medical Officer of Health [or Medical Practitioner appointed or employed by the Port Sanitary Authority].

NOTE.—The expression “ Infected Ship ” means a ship which at the time of its arrival from a foreign port has on board a case of Cholera, Yellow Fever, or Plague, or which has had on board a case of Cholera or Plague within a period of seven days, or of Yellow Fever within a period of eighteen days prior to that time. The expression “ Suspected Ship ” means a ship which has had on board during the voyage or during the stay of the ship in the port of departure or in a port in the course of the voyage a case of Cholera, Yellow Fever, or Plague, but which has not had on board a fresh case of Cholera or Plague within a period of seven days, or of Yellow Fever within a period of eighteen days, prior to the time of its arrival from a foreign port.

ARTICLE VI.—If the Medical Officer of Health of the Manchester Port Sanitary Authority, having visited and examined any ship under Article IV., find the ship to be an infected ship, or a suspected ship, and if the ship be not moored in or at any of the basins, docks, quays, or wharves within the jurisdiction of the Manchester Port Sanitary Authority, he shall give a certificate similar to that prescribed by Article V., and inform the Liverpool Port Sanitary Authority of the case by the speediest method available, and shall then remain on board the ship until the same has been moored or anchored at the Liverpool Mooring Station, or until the arrival on board of the Medical Officer of Health of the Liverpool Port Sanitary Authority. He shall also give to Us information as to the arrival of the ship, and such other particulars as We may require.

ARTICLE VII.—The Master of any ship certified in accordance with the provisions of Article VI. by the Medical Officer of Health of the Manchester Port Sanitary Authority to be an infected ship or a suspected ship shall carry out the directions of the said Medical Officer of Health (not relating to matters of seamanship) as to the removal of the ship to and its mooring or anchoring at the Liverpool Mooring Station, and any other directions which the said Medical Officer of Health may deem necessary to be given for the purpose of carrying into effect the provisions of Article VI.

ARTICLE VIII.—The following provisions shall apply to a ship certified as aforesaid by the Medical Officer of Health of the Liverpool Port Sanitary Authority, or by the Medical Officer of Health of the Manchester Port Sanitary Authority, to be an infected ship or a suspected ship:—

- (1.) The Master of any ship so certified to be an infected ship or a suspected ship shall as soon as possible moor or anchor the ship at the Liverpool Mooring Station, and the ship shall remain there until the requirements of this Order have been duly fulfilled.
 - (2.) No person (other than an Officer of Customs or a person acting in the execution of this Order) shall leave a ship moored or anchored in pursuance of subdivision (1) of this Article until the examination hereinafter mentioned has been made.
 - (1.) The Medical Officer of Health of the Liverpool Port Sanitary Authority shall, as soon as possible after a ship moored or anchored in pursuance of subdivision (1) of this Article, has been certified to be an infected ship or a suspected ship, examine every person on board the ship, and in the case of any person suffering from Cholera, Yellow Fever, or Plague, or from any illness which, in the opinion of the said Medical Officer of Health, may prove to be Cholera, Yellow Fever, or Plague, shall certify accordingly.
 - (4.) Every person certified by the Medical Officer of Health of the Liverpool Port Sanitary Authority to be suffering from Cholera, Yellow Fever, or Plague shall be removed, if his condition admit of removal, to some hospital or other suitable place appointed for that purpose by the Liverpool Port Sanitary Authority; and a person so removed shall not leave the hospital or place until the said Medical Officer of Health has certified that the person is free from the said disease.
- If a person so certified to be suffering from Cholera, Yellow Fever, or Plague cannot be removed, the ship shall remain subject, for the purposes of this Order, to the control of the Medical Officer of Health of the Liverpool Port Sanitary Authority; and the person shall not be removed from or leave the ship, except with the consent in writing of the said Medical Officer of Health.
- (5.) A person certified by the Medical Officer of Health of the Liverpool Port Sanitary Authority to be suffering from any illness which, in the opinion of that Officer, may prove to be Cholera, Yellow Fever, or Plague may either be detained on board the ship for a period not exceeding two days, or may be taken to some hospital or other suitable place appointed for that purpose by the Liverpool Port Sanitary Authority, and detained there, for a like period, in order that it may be ascertained whether the illness is or is not Cholera, Yellow Fever, or Plague.
- If any such person, while so detained, be certified by the said Medical Officer of Health to be suffering from Cholera, Yellow Fever, or Plague the provisions of subdivision (4) of this Article shall apply.
- (6.) A person who is on board a ship certified to be an infected ship, and who has not been certified as required by subdivision (3) of this Article, shall not be permitted to land unless he satisfy the Medical Officer of Health of the Liverpool Port Sanitary Authority as to his name, intended place of destination, and intended address at the said place of destination.

The name, intended place of destination, and address shall forthwith be given by the said Medical Officer of Health to the Clerk to the Liverpool

Port Sanitary Authority, and the said Clerk shall thereupon transmit the particulars to the Local Authority of the District in which the intended place of destination is situate.

Every such person who, within five days after landing, arrives at any place of destination or address other than such place or address as aforesaid, shall forthwith upon his arrival notify in writing his place of destination and address to the Medical Officer of Health of the Liverpool Port Sanitary Authority, or to the Local Authority of the District in which the place of actual destination or address is situate.

- (7.) The Medical Officer of Health of the Liverpool Port Sanitary Authority shall, in the case of every ship certified to be an infected ship or a suspected ship, give such directions, and take such steps as may appear to him to be necessary, for preventing the spread of infection, and the Master of the ship shall forthwith carry into execution all such directions as are so given to him.
- (8.) In the event of a death from Cholera, Yellow Fever, or Plague taking place on board a ship detained under subdivision (1) of this Article, the Master shall, as directed by the Liverpool Port Sanitary Authority or the Medical Officer of Health of that Authority, either cause the dead body to be taken out to sea, and committed to the deep, properly loaded to prevent its rising, or shall deliver the dead body into the charge of the said Port Sanitary Authority, who shall thereupon cause it to be otherwise lawfully and properly disposed of.
- (9.) The Master shall cause any clothing or bedding or any other article of personal use which is likely to retain infection, and which has been used by any person who has suffered from Cholera or Plague on board a ship detained under subdivision (1) of this Article, or who, having left the ship, has suffered from Cholera or Plague during the stay of the ship in any Port, to be disinfected or destroyed; and if the Master has neglected to do so before the ship arrives in port, he shall forthwith, upon the direction of the Liverpool Port Sanitary Authority or the Medical Officer of Health of that Authority, cause the aforesaid clothing, bedding, or other article to be disinfected or destroyed, as the case requires.
- (10.) The Master shall cause those parts of a ship detained under subdivision (1) of this Article which have been used as quarters by a person suffering from Cholera or Plague, or which, in the opinion of the Medical Officer of Health of the Liverpool Port Sanitary Authority, are infected with Cholera or Plague to be disinfected.

The Master shall also cause every article on board which is not included among those mentioned in subdivision (9) of this Article, and which, in the opinion of the Medical Officer of Health of the Liverpool Port Sanitary Authority, may be infected with Cholera or Plague to be disinfected or destroyed, according to the directions of the said Medical Officer of Health.

ARTICLE IX.—Where a ship bound to the Port of Manchester is not certified to be an infected ship, but is certified to be a suspected ship, or where any such ship has on board any person who is certified by the Medical Officer of Health to be suffering from an illness which in the opinion of that officer, may prove to be Cholera, Yellow Fever, or Plague, or where a ship has come from or has, during the voyage, called at a port infected with Cholera, Yellow Fever, or Plague, or where a ship is one which has passengers on board who are in a filthy or otherwise unwholesome condition, or where a ship is one in which there are rats infected with Plague, or in which there is or has been during the voyage an unusual mortality among rats, the Medical Officer of Health of the Liverpool Port Sanitary Authority, if the ship be within the Port of Liverpool, or the Medical Officer of Health of the Manchester Port Sanitary Authority, if the ship be within the Port of Manchester, may, if in his opinion it is desirable with a view to checking the introduction or spread of Cholera, Yellow Fever, or Plague, give a certificate in duplicate in the following form, or to the like effect, and shall deliver one to the Master, and retain the other or transmit it to the Port Sanitary Authority whose officer he is:—

Certificate.

.....day of.....19 .

.....

.....PORT SANITARY AUTHORITY.

I hereby certify that I have examined the ship
from , now in the Port of ,
and that the ship is a suspected ship by reason of Cholera *or* Yellow Fever *or* Plague,
or the ship has on board a person or persons suffering from illness, which in my opinion,
may prove to be Cholera, *or* Yellow Fever, *or* Plague, *or* the ship has come from *or*
has, during the voyage, called at a port infected with Cholera, *or* Yellow Fever, *or*
Plague. *or* the ship has passengers on board in a filthy *or* otherwise unwholesome
condition, *or* the ship is one in which there are rats infected with Plague, *or* the ship
is one in which there is *or* has been during the voyage an unusual mortality among
rats.

* And that, in my opinion, it is desirable with a view to checking the introduction
or spread of Cholera, *or* Yellow Fever, *or* Plague, that the persons on board the ship
should not be allowed to land unless they satisfy me as to their names, places of
destination, and addresses at those places.

.....

Medical Officer of Health [*or* Medical Practitioner
appointed or employed by the Port Sanitary
Authority].

NOTE.—The expression “Suspected Ship” means a ship which has had on board
during the voyage or during the stay of the ship in the port of departure or in a port
in the course of the voyage a case of Cholera, Yellow Fever, or Plague, but which has
not had on board a fresh case of Cholera or Plague within a period of seven days or
of Yellow Fever within a period of eighteen days, prior to the time of its arrival from
a foreign port. Where, in the opinion of the Medical Officer of Health, it is necessary
or desirable to render Article X. applicable, the passage marked with an asterisk
should always form part of the Certificate.

ARTICLE X.—When a certificate has been given, in pursuance of Article IX., a
person on board the ship shall not leave or be allowed to leave the ship unless he satisfy
the Medical Officer of Health of the Liverpool Port Sanitary Authority or the Medical
Officer of Health of the Manchester Port Sanitary Authority, as the case may be,
as to his name, intended place of destination, and intended address at that place.

The name, intended place of destination, and address shall forthwith be given by
the Medical Officer of Health of the Liverpool Port Sanitary Authority or the Medical
Officer of Health of the Manchester Port Sanitary Authority, as the case may be, to
the Clerk to the Liverpool Port Sanitary Authority or the Clerk to the Manchester
Port Sanitary Authority, as the case may be, and the said Clerk shall thereupon
transmit the particulars to the Local Authority of the district in which the intended
place of destination is situate.

Every such person who, within five days after landing, arrives at any place of
destination or address other than such place or address as aforesaid shall, forthwith
upon his arrival, notify in writing his place of destination and address to the Medical
Officer of Health of the Liverpool Port Sanitary Authority or the Medical Officer
of Health of the Manchester Port Sanitary Authority, as the case may be, or to the
Local Authority of the district in which the place of actual destination or address
is situate.

ARTICLE XI.—Where a ship bound to the Port of Manchester has been certified
by the Medical Officer of Health of the Liverpool Port Sanitary Authority or the
Medical Officer of Health of the Manchester Port Sanitary Authority, as the case
may be, to be an infected ship or a suspected ship by reason of Cholera, *or* where
the said Medical Officer of Health has ascertained that any such ship has come

from or has, during the voyage, called at a port infected with Cholera, he may direct all bilge water and water ballast to be pumped out in some suitable place before the ship enters any dock or basin :

Provided that, in every case where there is reasonable cause to apprehend that the ship may be endangered by the removal of the water ballast, the Medical Officer of Health of the Liverpool Port Sanitary Authority or the Medical Officer of Health of the Manchester Port Sanitary Authority as the case may be, may cause any tank or other receptacle containing the water ballast to be sealed, and thenceforward, so long as the ship remains within the jurisdiction of the Liverpool Port Sanitary Authority or the Manchester Port Sanitary Authority, as the case may be, no person shall without the permission of the said Medical Officer of Health break or remove the seal, or discharge or remove from the tank or receptacle any part of the water ballast.

On the Liverpool Port Sanitary Authority or the Manchester Port Sanitary Authority providing a proper supply of water for drinking and cooking purposes for persons on board any such ship, the Medical Officer of Health of the Liverpool Port Sanitary Authority or the Medical Officer of Health of the Manchester Port Sanitary Authority may direct all casks or tanks on board the ship containing water for the use of those persons to be emptied and cleansed, and the Master shall cause the said direction to be carried into effect.

ARTICLE XII.—(1.) Where a ship bound to the Port of Manchester has been certified to be an infected ship by reason of Plague the Master of the ship shall, under the direction and to the satisfaction of the Medical Officer of Health of the Liverpool Port Sanitary Authority or the Medical Officer of Health of the Manchester Port Sanitary Authority, as the case may be, and at and within such time as the said Medical Officer of Health by a requisition in writing addressed to the Master prescribes, employ suitable means for the effectual destruction of the rats in the ship.

(2.) Where a ship bound to the Port of Manchester has been certified to be a suspected ship by reason of Plague the Master of the ship shall, if the Medical Officer of Health of the Liverpool Port Sanitary Authority, or the Medical Officer of Health of the Manchester Port Sanitary Authority, as the case may be, make a requisition to that effect, employ, by and under the direction and to the satisfaction of the said Medical Officer of Health, and at and within such time as the said Medical Officer of Health by his requisition prescribes, suitable means for the effectual destruction of the rats in the ship.

(3.) Where the Medical Officer of Health of the Liverpool Port Sanitary Authority or the Medical Officer of Health of the Manchester Port Sanitary Authority, as the case may be, is satisfied and certifies in writing that compliance with the requirements of this subdivision is necessary as a precaution against the introduction or spread of Plague, the Master of a ship bound to the Port of Manchester and coming or being within the jurisdiction of the Liverpool Port Sanitary Authority or of the Manchester Port Sanitary Authority, as the case may be, which ship, though not certified to be an infected ship or a suspected ship by reason of Plague, has come from or has, during the voyage, called at a port infected with Plague, shall, at and within such time as the said Medical Officer of Health by his certificate prescribes, and under the direction and to the satisfaction of the said Medical Officer of Health, employ suitable means for the effectual destruction of the rats in the ship.

The Liverpool Port Sanitary Authority or the Manchester Port Sanitary Authority shall repay all expenses which their Medical Officer of Health may certify in writing to have been reasonably incurred by the Master for the purpose of compliance with the requirements of this subdivision.

(4.) Every requisition or certificate of the said Medical Officer of Health for the purposes of this Article shall be in duplicate, and one copy shall be delivered by the Medical Officer of Health to the Master and the other copy shall be retained by the Medical Officer of Health, or shall be transmitted by him to the Port Sanitary Authority whose officer he is.

ARTICLE XIII.—(1.) Where the Medical Officer of Health of the Liverpool Port Sanitary Authority or the Medical Officer of Health of the Manchester Port Sanitary Authority, as the case may be, certifies in writing that a rat in a ship bound to the Port of Manchester and coming or being within the jurisdiction of the Liverpool Port Sanitary Authority, or of the Manchester Port Sanitary Authority, as the case may be, is infected with Plague, the Master of the ship shall, at and within such time as the said Medical Officer of Health by his certificate prescribes, and under the direction and to the satisfaction of the said Medical Officer of Health, employ suitable means for the effectual destruction of the rats in the ship.

(2.) The Master of a ship bound to the Port of Manchester and coming or being within the jurisdiction of the Liverpool Port Sanitary Authority or of the Manchester Port Sanitary Authority, as the case may be, which ship, by reason of Plague, is an infected ship, or a suspected ship, or which has come from or has, during the voyage, called at a port infected with Plague, or in which there are rats infected with Plague, or in which there is or has been during the voyage an unusual mortality among rats shall, under the direction and to the satisfaction of the Medical Officer of Health of the Liverpool Sanitary Authority or the Medical Officer of Health of the Manchester Port Sanitary Authority, as the case may be, take all such precautions or employ all such means for effectually stopping the access of rats from the ship to the shore, as in the opinion of the Medical Officer of Health are measures reasonably necessary for the prevention of danger arising to public health from the ship.

(3.) Every certificate of the said Medical Officer of Health for the purposes of this Article shall be in duplicate, and one copy shall be delivered by the said Medical Officer of Health to the Master and the other copy shall be retained by the Medical Officer of Health or shall be transmitted by him to the Port Sanitary Authority whose officer he is.

ARTICLE XIV.—(1.) Where in the case of a ship bound to the Port of Manchester and coming or being within the jurisdiction of the Liverpool Port Sanitary Authority or of the Manchester Port Sanitary Authority, the Medical Officer of Health of the Liverpool Port Sanitary Authority or the Medical Officer of Health of the Manchester Port Sanitary Authority, as the case may be, certifies in writing that compliance with the requirements of this subdivision is necessary as a precaution against the introduction or spread of Yellow Fever, the Master of a ship which has been certified to be an infected ship or a suspected ship by reason of Yellow Fever, or which has come from or has, during the voyage, called at a port infected with Yellow Fever, shall, under the direction and to the satisfaction of the Medical Officer of Health, employ suitable means for the effectual destruction of the mosquitoes and of the larvæ of mosquitoes in the ship.

The Liverpool Port Sanitary Authority or the Manchester Port Sanitary Authority shall repay all expenses which their Medical Officer of Health may certify in writing to have been reasonably incurred by the Master of a ship, which has not been certified to be an infected ship or a suspected ship by reason of Yellow Fever, for the purpose of compliance with the requirements of this subdivision.

(2.) Every certificate of the Medical Officer of Health for the purposes of this Article shall be in duplicate, and one copy shall be delivered by the Medical Officer of Health to the Master, and the other copy shall be retained by the Medical Officer of Health, or shall be transmitted by him to the Port Sanitary Authority whose officer he is.

ARTICLE XV.—As regards a ship bound to the Port of Manchester, the Master of the ship, or any other person, shall answer truly all such questions put to him by and give all such information to any Officer of Customs or Medical Officer of Health as are necessary for any purpose of this Order; and a person who is required in pursuance of this Order to give to the Medical Officer of Health or to notify to any Local Authority the name and intended place of destination and address of the said person shall not knowingly give or notify a false or fictitious name, place of destination or address, and shall not refuse or neglect to give or notify as aforesaid the true name, intended place of destination, and address of the said person.

ARTICLE XVI.—(1.) The Liverpool Port Sanitary Authority and the Manchester Port Sanitary Authority may appoint one or more legally qualified medical practitioners to act in the execution of this Order, either in place of or as an assistant or assistants to the Medical Officer of Health, and may pay the said practitioner or practitioners reasonable remuneration for his or their services.

(2.) The Liverpool Port Sanitary Authority or the Manchester Port Sanitary Authority, if We so require shall appoint a legally qualified medical practitioner to act in the execution of this Order in the place of the Medical Officer of Health.

The Liverpool Port Sanitary Authority or the Manchester Port Sanitary Authority shall pay the medical practitioner appointed in pursuance of this subdivision such remuneration for his services as We direct.

ARTICLE XVII.—(1.) Where the Master of a ship bound to the Port of Manchester is required by or in pursuance of this Order to cause any clothing, bedding, or other article to be disinfected or destroyed, to cause any parts of the ship to be disinfected, to cause any casks or tanks containing water to be emptied and cleansed, or to employ suitable means for the effectual destruction of rats, or mosquitos, or the larvæ of mosquitos, the Liverpool Port Sanitary Authority or the Manchester Port Sanitary Authority as the case may be shall at the request of, in substitution for, and, if they think fit, at the cost of the Master, cause anything to be done in compliance with any such requirement as aforesaid.

In that case the Liverpool Port Sanitary Authority or the Manchester Port Sanitary Authority shall, on the completion of the work, and the payment to the Port Sanitary Authority of the authorised charge, furnish the Master, if he so desire, with a certificate under the Seal of the Port Sanitary Authority to the effect that there has been compliance with any such requirement as aforesaid so far as regards the particular matter mentioned in the certificate.

Thenceforth, for the purposes of this Order, and so far as regards the particular matter aforesaid the Master shall be deemed to have complied with every requirement of or in pursuance of the Order.

For the purposes of this subdivision the expression “the authorised charge” means, in relation to any work undertaken by the Port Sanitary Authority, such reasonable sum as, to the exclusion of any charge or claim in respect of profit, represents the actual or estimated cost of the work to the Port Sanitary Authority, and as does not in any case exceed the sum of Twenty Pounds, but the Port Sanitary Authority may, if they think fit, require the authorised charge or a part of the authorised charge to be paid to or deposited with them before any such work as aforesaid is begun.

(2.) Every charge authorised by subdivision (1) of this Article shall be recoverable by the Port Sanitary Authority as expenses or demands within the meaning of Section 251 or of Section 261 of the Public Health Act, 1875, and those Sections and any enactments referred to in or applied by those Sections shall apply and have effect for the recovery of the said expenses as if the said Sections and enactments were herein re-enacted and in terms made applicable to the case.

ARTICLE XVIII.—The Liverpool Port Sanitary Authority shall, until We by Order otherwise direct, defray such costs as may reasonably be incurred by them as regards ships bound to the Port of Manchester, in connection with the visitation, examination, and disinfection of the ships, the towage of the ships, the removal to, and the maintenance in the hospital provided by the said Port Sanitary Authority of persons affected with Cholera, Yellow Fever, or Plague, and removed thereto from the ships, the disposal as provided by subdivision (8) of Article VIII. of the bodies of persons dying from Cholera, Yellow Fever, or Plague, on board the ships and of persons removed therefrom to the said hospital, and such other incidental expenses as may be incurred by them in carrying out the provisions of this Order (including the remuneration of any person employed by them in respect of services rendered under the provisions of this Order as regards the ships) and shall from time to time render to the said Manchester Port Sanitary Authority particulars respecting any such costs incurred as aforesaid.

ARTICLE XIX.—The Manchester Port Sanitary Authority shall repay from time to time to the Liverpool Port Sanitary Authority the expenses incurred by them under the provisions of Article XVIII., and any such expenses shall be deemed to be a debt due from the Manchester Port Sanitary Authority to the Liverpool Port Sanitary Authority, and may be recovered accordingly.

ARTICLE XX.—The Accounts of the Liverpool Port Sanitary Authority relating to the said expenditure shall be open at all reasonable times, without payment, to inspection and transcription by any officer of the Manchester Port Sanitary Authority authorised by them for that purpose.

ARTICLE XXI.—If at any time any difference arises between the Liverpool Port Sanitary Authority and the Manchester Port Sanitary Authority respecting any matter arising out of the provisions of this Order, the same shall be referred to and be settled by Us.

ARTICLE XXII.—With regard to ships which are moored in or at any of the basins, docks, quays, or wharves within the jurisdiction of the Manchester Port Sanitary Authority the following provisions shall have effect:—

- 1.) The Medical Officer of Health of the Manchester Port Sanitary Authority, if he have reason to suppose that a ship is an infected ship or a suspected ship, shall, or, if he have reason to suppose that the ship has come from, or has, during the voyage, called at a port infected with Cholera, Yellow Fever, or Plague, may visit and examine the ship for the purpose of ascertaining whether it is an infected ship or a suspected ship; and may make the like visit and examination in the case of a ship which has come from, or has, during the voyage, called at a port infected with Cholera, Yellow Fever, or Plague. The Master of any such ship shall permit the ship to be so visited and examined.
- (2.) If the Medical Officer of Health of the Manchester Port Sanitary Authority, on making an examination of a ship under subdivision (1) of this Article, be of opinion that the ship is an infected ship or a suspected ship, he shall forthwith give a certificate in duplicate, as required by Article VI. and shall give to Us information as to the case and subdivisions (2) to (10) of Article VIII. shall apply to the ship, and to the Master and the persons on board thereof, and to the Manchester Port Sanitary Authority and the Medical Officer of Health of the Manchester Port Sanitary Authority, as if in those subdivisions the words “Medical Officer of Health of the Manchester Port Sanitary Authority” were substituted for the words “Medical Officer of Health of the Liverpool Port Sanitary Authority” and the words “Manchester Port Sanitary Authority” for the words “Liverpool Port Sanitary Authority.”
- (3.) On the Manchester Port Sanitary Authority providing a proper supply of water for drinking and cooking purposes for persons on board a ship which has been certified to be an infected ship or a suspected ship by reason of Cholera, or which has been ascertained to have come from or have called at a port infected with Cholera, the Medical Officer of Health of that Port Sanitary Authority may direct all casks or tanks on board the ship containing water for the use of those persons to be emptied and cleansed, and the Master shall cause the said direction to be carried into effect.
- (4.) The Medical Officer of Health of the Manchester Port Sanitary Authority may, in the case of any ship certified to be an infected ship or a suspected ship, which shall not have commenced to discharge its cargo, give directions for its removal and towage to and its mooring or anchoring at the Liverpool Mooring Station, and after he has given those directions, he shall inform the Liverpool Port Sanitary Authority of the case by the speediest method available, and shall remain on board the ship until the same has been moored or anchored at the Liverpool Mooring Station, or until the arrival on board of the Medical Officer of Health of the Liverpool Port Sanitary Authority. He shall also give to Us such particulars as to the ship as We may require.

The Master of any ship certified to be an infected ship or a suspected ship shall carry out the directions of the Medical Officer of Health of the Manchester Port Sanitary Authority (not relating to matters of seamanship) as to the removal of the ship to and its mooring or anchoring at the Liverpool Mooring Station, and any other directions which the Medical Officer of Health may deem necessary to be given for the purpose of carrying into effect the provisions of this Article, and in other respects, the Articles of this Order relating to ships not moored in or at any of the basins, docks, quays, or wharves within the jurisdiction of the Manchester Port Sanitary Authority shall apply to any ship certified as aforesaid under this Article.

ARTICLE XXIII.—The Master of a ship bound to the Port of Manchester and being an infected ship or a suspected ship shall, when the ship is within three miles of the coast of any part of England or Wales, or is within the limits of a Port, cause to be hoisted—

(i.) At the masthead or where it can be best seen, during the whole of the time between sunrise and sunset, a day signal, consisting of a large flag of yellow and black borne quarterly; or

(ii.) At the peak or other conspicuous place where it can be best seen, and at a height of not less than twenty feet above the hull of the ship, during the whole of the time between sunset and sunrise, a night signal, consisting of three lights, which shall be arranged, at a distance of not less than six feet apart, in the form of an equilateral triangle, and of which the light at the apex of the triangle shall be white, and the other lights at the ends of the base of the triangle shall be red in colour.

No person (other than an Officer of Customs or a person acting in the execution of this Order) shall leave any such ship until after such visit of the Officer of Customs as is mentioned in Article III., or until after the visit of the Medical Officer of Health of the Liverpool Port Sanitary Authority or of the Medical Officer of Health of the Manchester Port Sanitary Authority in pursuance of Article IV.

ARTICLE XXIV.—Nothing in this Order shall render liable to detention, disinfection, or destruction any article forming part of any mail (other than a parcel mail) conveyed under the authority of the Postmaster-General, or of the postal administration of any Foreign Government, or shall prejudicially affect the delivery in due course of any such mail (other than a parcel mail) to the Post Office in accordance with the provisions of the Post Office Acts.

Given under the Seal of Office of the Local Government Board, this Twenty fifth day of February, in the year One thousand nine hundred and nine.



JOHN BURNS,

President.

THOS. PITTS,

Assistant Secretary.



District
of the
Liverpool Port Sanitary Authority.
(edged Blue)



